

# The American Bee Journal

DEVOTED EXCLUSIVELY TO BEE CULTURE.

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## Editor's Table.

☞ Don't force sales of honey now, and thus depress the market. A little delay will be very beneficial.

☞ See the new prices on foundation in this issue. As it has proved a success, the demand will be large and the prices correspondingly small.

☞ Friend M. Sorrick has sent us the Catalogue of the Iowa Industrial Exposition, which will open in Des Moines, Iowa, on Sept. 26th, and close Oct. 31, 1877.

"THE LOCUST PLAGUE" is the title of a new work on the Grasshopper or Rocky Mountain Locust, by Prof. C. V. Riley. It is nicely gotten up and illustrated. The matter is very interesting and exhaustive. The Professor gives some valuable hints as to its destruction.

THE CROPS in this country are simply enormous, but in Europe they are in gloomy contrast. In America the present crop has but seldom been equalled, in either quality or quantity. The crops of the north-west will this year bring two thousand millions of dollars into the hands of the producers. *Good enough!!*

☞ Friend C. O. Perrine has gone to Europe in the interest of bees, honey, and—C. O. Perrine. He intends to visit England, France, Germany, and Italy. He says he shall try to determine the question of the existence of black bees in Italy, see whether bees work as well there as in this country, etc. He intends to buy some queens, and try the experiment of "importing on his own hook." When he returns our readers will learn the results of his investigations and experiments.

☞ Friend Baldwin of Lake County, Indiana, says that he and friend Keller always winters without loss by packing their hives some 3 inches all around with oak leaves.

☞ H. K. & F. B. Thurber, have purchased the entire honey crops of friends N. N. Betsinger and G. M. Doolittle, of New York. These crops are large, and we congratulate them on their early sale.

☞ Those who send honey to be exhibited in New York at the National Convention should see that it is nicely put up and properly labeled, stating the kind of honey and the bee-keeper's name and address.

☞ A copy of J. M. Hicks' "North American Bee-Keepers' Guide" is on our table. It contains much that is interesting to novices; and had the little work been nicely printed it would have been more acceptable generally. Of course it is intended chiefly to introduce Mr. Hick's hive.

DZIERZON THEORY.—Referring to the new issue of this excellent and valuable work, Novice remarks as follows:

"We congratulate friend Newman on having struck upon the bright idea of giving us the Dzierzon theory in a neat little pamphlet. This theory has been attacked from all sides for many years, yet like the Copernican theory of old, it stands as firm as the hills. Some of our young friends who are so hasty in deciding that the drone progeny is affected by the fertilization of the queen, had better give it a careful reading. It is a good thing for us all to read over carefully, even if we have once been over it in the first volume of the A. B. J. If there is anything you do not get hold of, in regard to queens, drones, and fertile workers, you had better read it. If thoroughly studied, it would save many a column of queries and long stories in all our bee papers."

### Seasonable Hints.

Usually about the middle of September, all storing ceases in this latitude; then surplus boxes should be removed. If troubled with robbing bees, contract the entrances. If it is necessary to feed for winter, it should be done in the latter part of this month. If desired, colonies may be Italianized during the fall months. Care should be taken not to expose refuse honey, or it may cause trouble in the apiary. An examination should be made of every colony during this month, in order to ascertain its condition. Weak colonies should be strengthened by full frames from strong ones, or united. Any queen that is old or unprolific should now be superseded by a young and vigorous one, else she may die in mid-winter and endanger the life of the colony in the spring. Be sure that all colonies have young bees and plenty of room for clustering near the centre of the hive, for it will not do to go into winter quarters with old bees only.

Fall honey is often gathered in abundance from golden-rod and other fall flowers during this month, and if the bees store more than is needed in the brood chamber, the extractor should be used, not to rob them, but to give the queen room to lay in—and thus produce the young bees so essential to safe wintering.

After having thoroughly experimented with all shapes and sizes of frames, Novice says: "I recommend the Langstroth frame for everybody, and for every purpose, in preference to anything else.... I do not believe there is anything better." In this view the A. B. J. and Novice are in perfect accord.

Friends: Look at the direction label on this paper. If the date on it is not "up with the times," you will greatly oblige us by sending us the lever to "boost it ahead." By urgent request we have waited on hundreds of our patrons till harvest; now the harvest is so plenty that they can easily fulfill their promises.

### The National Convention.

Particulars of the arrangements made by friend Coe, for the session of the National Convention on Oct. 16th, may be found in this issue of THE JOURNAL. This is an important meeting and will we think result in much good to the bee-keeping fraternity. Honey producers and dealers will have an opportunity to confer on the all-important subject of how to place honey upon the market so as to make it the most profitable to bee keepers.

Messrs. Thurber offer a \$50 gold medal for the finest sample of honey in the most marketable shape.

The Hon. and venerable Peter Cooper intends to offer a silver medal. He has already placed the magnificent Hall of the American Institute at our disposal, for the sessions of the Convention.

The finest and most interesting display of honey, beeswax, bees and aparian supplies ever made ought to be on exhibition at the American Institute.

Let all subordinate associations send delegates, and provide for at least a part of the necessary expense. Where there is no association, let any bee-keeper elect himself a delegate, and go, in the interest of bee-keepers generally and of *himself* in particular.

The invitation is *broad* and general.  
—COME!

HON. PETER COOPER.—An Exchange remarks that the growth of the country is well shown by the fact that the man is still alive who, after middle age, built the first railway engine made on this continent. That man is our esteemed and philanthropic countryman, Peter Cooper. He built the engine after his own designs in Baltimore a little more than thirty years ago, and it was successfully operated on the Baltimore and Ohio Railway.

Mr. Cooper was the first to apply anthracite coal to the puddling of iron, which he did in a rolling and wire mill that he had erected in New York.

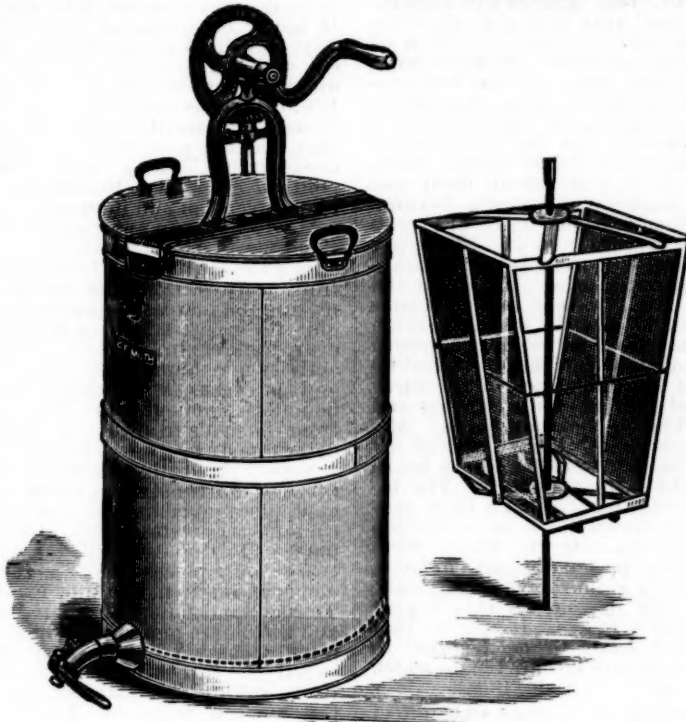
Mr. Cooper was 76 last February, and still feels a deep interest in the country and in all the people, particularly the laboring classes.

**Muth's Extractor.**

Friend Muth has just had a *new* cut of his extractor engraved, and as it more correctly represents his improved machine we give it to our readers. The cut speaks for itself and will be readily understood by all.

boxes, which they invariably sell gross weight. Now, a cap of honey weighing  $4\frac{1}{4}$  lbs. gross weight, will tare  $1\frac{1}{4}$  lbs., and this the packer has to lose, a disadvantage which will be readily understood.

It is a truth that our many friends will, no doubt, willingly attest that, our avowed and accomplished aim has always been the "best goods at the cheapest prices," and in pursuance of this principle, we took hold of the business of packing honey on a large



MUTH'S EXTRACTOR.

**Surplus Frames.**

In Thurber's Trade Circular, we notice the following, concerning surplus frames and honey boxes:

The absolute failure of the honey crop in California is, beyond all peradventure, now an established fact, and prices, in consequence, have largely advanced, with a tendency towards still higher figures. The failure of the California crop affects the price of honey packed in glass to a still greater degree, owing to the fact that California honey is stored in what are called Harbison frames; these are racked together, packed in cases, and sold net weight, thus packers were able to cut out the combs and pack them into glass jars and tumblers, without loss of tares. This year we are obliged to fall back upon Eastern and Southern apiarists for our supplies. The custom among these bee-men is, to have their honey stored in 2 and  $4\frac{1}{4}$  lb. caps or

scale, and by applying our usual business principles, succeeded in reducing the prices for honey packed in glass more than 40 per cent., but for the reasons above given, we are obliged this season, to advance prices materially, although not near to the old prices of 1874-5.

Anticipating the advance in honey, we contracted early in the season for the crops of all the best apiarists stored in caps, not to exceed  $2\frac{1}{4}$  lbs. each in weight, and to meet the requirements of the trade, will pack only 12 of these little caps in a crate. The caps are to be four sides glass, while the tops and bottoms and the entire crates are to be made out of the whitest New England pine, all second growth. The honey thus stored, will at once present the neatest and newest possible appearance, which, in connection with the fine quality of the goods, will tend greatly to increase their consumption.

Go to the National Convention.

### The Honey Market.

The American *Grocer* says:

We are in possession of reliable information from San Diego, California, confirming the previous reports of the almost total failure of the honey crop in that and the counties lying contiguous thereto. Our readers will remember that last year was a wonderfully propitious one for the secretion of honey in that section—the rains were ample and the dews regular; the crop was unprecedentedly large. San Diego county alone shipped 1,277,155 lbs., and it is estimated that the yield in the entire State reached 2,500,000 lbs. This, or most of it, was forced upon our Eastern markets and prices became depressed; quotations for choice comb honey fell rapidly from 28c. to 18c. per lb., the most of it went into consumption at the latter price. This year the immense floral variety and phenomenally splendid climate of that section seem to have availed nothing; a drouth set in, and worse yet, they have had no dews, and the whole face of the earth is parched into unproductiveness and death. What a metamorphosis! Mr. Harbison writes: "I have visited my apiaries the past week, and have heard from all the principal points. The inevitable result will be that a large portion of the bees will die of starvation unless fed enough to carry them through the period of six months. They are only gathering a living now, and can only depend on this lasting for, say 5 or 6 weeks. It follows that feeding will have to be resorted to from that time till flowers bloom, which will, at best be, till Feb., 1878."

The question now arises what effect the loss of California's crop will have upon the market? The opinion has been hazarded by an eminent apiarian that prices will be forced back to the old standard. This is a delusion that producers will, no doubt, delight to hug, but we question whether a calm investigation of the situation will justify such a hope.

The immense consumption of honey last fall and winter has satisfied capitalists that money can be profitably employed to develop our honey resources, even at the low prices that ruled them. Consumption always renders an article cheap and abundant; it renders possible the investment of vast capital in the establishment of large apiaries throughout the country, the reduction of transportation thereby making remote crops accessible and enabling bee men to work their apiaries at the minimum cost. It establishes the business upon a firmer basis and promotes this product to the dignity of a staple. All this could never be done

unless the vast consumption of honey rendered it wise and practicable to do so. Here we see the advantage of the merchant; he induces consumption by pressing its sale, and it is the consumption of honey that increases its cheapness. It is only by extravagance, so to speak, by free and extensive use of honey, that the machinery by which it is made cheap is put into operation. If honey is consumed largely the resources will be co-extensively developed, and our immense wealth in this direction will startle us still further. If but little is used little will be produced, and that little dear. "Consumption and the possibilities of extended consumption," says that celebrated political economist, Mr. Bunce, "stimulate invention and industry."

Mr. Heddon, an apiarian of no inconsiderable practical experience, has for a long time attempted to dissuade men from embarking in the bee business, fearing the increased production would glut the market. He will find, however, that capital is not fixed in its activity nor human energies limited, and as Nature's resources are fairly boundless, honey will be extracted from the fields to an extent immensely determined by the demands of consumers. We all remember the old fable of Fortunatus, in whose purse a gold piece appeared as rapidly as the contents were withdrawn. In the new purse of Fortunatus, called production, two or more pieces appear as rapidly as one is withdrawn, and thus it is that in Texas, Louisiana, Florida, Alabama, and the South generally, which is now rapidly passing out of what may be called a "transition state," and activity taking the place of indolence, the modern purse of Fortunatus is found. Capital has found investment there, and this tier of States lying in the same latitude with California promises to send to market almost enough honey, produced in excess of last year, to offset the loss sustained by the failure of the crop in the latter State. More than this, the prospect in New York State for a large crop is very encouraging. One gentleman, in the central part of the State, recently informed us that he thought his yield would aggregate 100,000 to 150,000 lbs., against 70,000 lbs. last year. Favorable reports also reach us from Michigan, Wisconsin, and Ohio. Thus it will be seen that, notwithstanding the disastrous news from the Golden State, last year's consumption encouraged production in other quarters to such an extent that the increased supply thus secured will keep honey within reach of the poor, and we predict that prices will hardly be restored to the old standard, though California honey will, no doubt, be higher than last year.



## Southern Notes,

GLEANEED BY

W. J. ANDREWS, - COLUMBIA, TENN.

### Our Visiting Jaunt.

We took advantage of the reduced rates, made in consequence of the Saengerfest or musical festival which took place at Louisiana, to visit some of our friends South. We spent a day and night attending the festival. At 4 P. M. on the 11th, we found the cars of the O. & M. R. R., and at 8 P. M. landed in Cincinnati. The following morning we called on friend

CHAS. F. MUTH,

spending the morning and driving with him. After dinner, he had his horse and buggy harnessed up and we soon found ourselves on the road to Mt. Healthy to pay a visit to our friend

J. S. HILL,

at whose residence we found ourselves in due time, and were soon among his bees. It is our opinion that Mr. Hill has one of the best, if not the best, apiaries in the United States. It is certainly far ahead of all others we ever visited, and we have visited quite a number. Everything is in apple-pie order. He has a place for everything and everything in its place. He uses the Langstroth hive, two-stories high, all were painted, and the tops covered with metal. He goes mostly for box or section-frame honey, but his crop this year, compared to that of last, was a failure. We spent but a short time at friend Hill's, but in that time we learned a great deal. We do not wish to crowd friend Hill with visitors, but would advise all amateurs who wish to learn the bee business thoroughly, if it be convenient, to pay friend Hill's apiary a visit. We know such will be made welcome. We took tea with friend Hill, after which we wended our way back to Cincinnati, under the shade of night.

We intended the next morning to go to Oxford and pay the

REV. L. L. LANGSTROTH.

a visit, but Mr. Muth thought our trip would be in vain, as he did not think Mr. L. would be able to receive us if we went. So we gave the trip up. We wrote Mr. L. a note before leaving, and a day or two after we returned we received a postal card in reply from his daughter, stating that her father was too unwell to see me and expressing regret, etc.

### FRIEND MUTH

insisted on our staying over another day, but seeing that he was very busy, and that we were causing him to neglect his business, but which he did without any reluctance, and was so very kind and liberal-hearted, that we could not get our mind's consent to remain and impose on his good nature any further. Our sincere hope is that it may be in our power some day to return the courtesies shown us by him.

### A CORRECTION.

We wish to correct a statement made in the July number of the JOURNAL by Mr. Ch. Dadant. We did not offer Mr. Hardin Haines \$50 for a Cyprian queen, but we wrote Mr. Dadant that we had written Mr. Hardin Haines that we thought his price—\$15—was too low for Cyprian queens, and that we had made an offer of \$50 for a genuine one. Mr. Haines replied to us that "he did not know they were so high priced."

I had also intended to take a part in the controversy in regard to "Dollar Queens," but failed to do so for want of time. In the main I agree with Mr. Ch. Dadant. I do not think it pays, and it has not been for the want of orders—on the contrary, up until we were prevented from sending by mail we received more orders than we could fill. Yet we think their sale has resulted in a great deal of good. Many have Italianized their bees who would not have done so if they had been compelled to pay more than \$1 for queens.

W. J. A.

### Weight of a Colony in June.

St. Mary's Parish, La., July 7, 1877.—Below please find an account of the gain and loss of a medium colony of black bees for the month of June, in this locality:

June 1, $\frac{1}{2}$ lb	11, $\frac{1}{2}$ lb	21, $1\frac{1}{2}$ R.
2, $\frac{1}{4}$	12, $\frac{1}{2}$	22, $\frac{1}{2}$
3, $\frac{1}{4}$	13, 4	23, 1
4, 0	14, $1\frac{1}{2}$	24, 1
5, 1	15, $1\frac{1}{2}$	25, 1
6, 0	16, $1\frac{1}{2}$	26, 1
7, 0	17, 2 Rain	27, 2
8, $\frac{3}{4}$	18, 0 Rain	28, $1\frac{1}{2}$
9, $\frac{3}{4}$ Rain	19, 0	29, 2
10, $\frac{3}{4}$	20, 1	30, 2

O, means that they gathered what they consumed daily. There was a loss only on one day (22d,  $\frac{1}{2}$  lb). The last rain we had previous to June 1st was on May 20th.

Bees are now bringing in honey rapidly. My scale hive showed a gain of 5 lbs. yesterday. I have now 85 colonies in frame hives, and propose doubling them next year. They pay well in this section.

J. D. BEDELL.

### Comb Honey—Honey House.

Hickman, Ky., Aug. 12, 1877.—“W. J. ANDREWS, Esq.: *Dear Sir*—As you are so kind to give information to Southern readers of our dear old A. B. J., I thought to ask you for some light about building a storehouse for honey. My means are very small. I have kept bees in a small way for pleasure and profit, for 4 years successively, but having lost my regular occupation as cabinetmaker, by fire, bees are now my sole support. I started this spring with 16, and have now 31 stands. I have up to this time extracted my honey every year; but was advised by Mr. Muth to raise comb honey in small frames, etc. My trouble is to keep it from insects, particularly the moth, though I never lost any bees by it. Will you give me some advice? I do not intend to keep more than about 60 stands. Which is cheapest, a frame building with weather-beading, etc., or one of brick, the same laid in the most economical way? Could the former be made perfectly moth proof? In answering the above questions you will oblige.” GUSTAV ILISCH.

[We agree with friend Muth in his advice to you to raise comb honey. We have paid friend Muth several visits, and he has thoroughly convinced us that Southern beekeepers must raise comb honey, in order to receive proper compensation. We think our poplar honey far superior in flavor to the white clover, yet our market is north of us, and they want either comb or very light honey. The latter I am quite certain we cannot get to compare with that gathered North.

We are not able to give you much advice in the construction of a honey house. A frame one we think would certainly be the cheapest. Ours is a frame building. Will not some of the readers of the JOURNAL, who have some experience with honey houses, give the information desired?—W. J. A.]

☞ We presented the Rev. M. Mahin, of Logansport, Ind., with a queen, and in a note to us he says: “I never saw purer Italian bees anywhere. I am delighted with them.” This queen was presented for the best article in the *Bee World*. We will make a similar present for the best article written for this department of THE AMERICAN BEE JOURNAL, between this and the January number. The editor to make the decision. W. J. A.

Nixburg, Ala., July 24, 1877.—“W. J. ANDREWS: My bees have done remarkably well this season. Begun in the spring with 8 stands; increased by natural swarming to 17; have taken over 500 lbs. of the nicest box honey, leaving more than that in lower part of hive for winter stores and rearing of brood. If I only had an extractor I could have taken at least 1,500 lbs. I fear that

they are so crowded with honey that they are not rearing brood enough. Without an extractor what is to be done in such cases? Please accept thanks for the queen; you are very, very kind.” KATE GRAYSEN.

[In the absence of an extractor, remove some of your full frames of honey from the brood chamber, and replace them with empty frames, and compel them to build comb.—W. J. A.]

☞ Miss Anna Saunders writes us, on Aug. 12, 1877:

“The golden-rod commenced blooming on the 1st inst. Hope it will yield some honey this season. It is very abundant here..... If there is anything in my letters you think fit for the JOURNAL, you can make use of it. I will write especially for it when possible.”

Thanks, Miss Anna, for the permission. We always find something useful in your letters, and shall gladly avail ourselves of your kind offer. W. J. A.

## Foreign Notes,

GLEANED BY FRANK BENTON.

It is astonishing how many periodicals and works treating on bee-culture have appeared within the last 5 years, in the Italian language.

In France and Bavaria, the early part of the season was very unfavorable for bees. Cold winds and rains prevailed. The later months have partially repaired the loss. The yield of honey has not been great, but there have been many swarms.

RUSSIA.—Bee-culture is receiving much more attention than formerly in Northern Russia. Through the influence of an extensive real-estate owner in Wladimir-Wolynsk, the plan of forming a stock company for the culture of bees, has received such encouragement that it will, without doubt, be carried into effect.

A CENTENARIAN.—L'Apiculteur says: “Toward the close of June there was held at Nancy, the celebration of the centennial birthday anniversary of Mathieu Dombasle, one of our famous agriculturists. Certain apiculturists profited by the occasion to press the hand of this patriarch of French observers.”

At the 31st exhibition and convention of the Society for the Elevation of Bee-Culture in Bohemia, held in Tetschen, Herr Edward Cori, Director of Chancellory, Bruex, was offered, on his Cyprian bees, the first premium consisting of a silver medal awarded by the State. The gentleman declined the medal, however, as he had previously received the same honor. It was then awarded to Herr P. Franz Goerner, of Politz, for Cyprian bees. The first premium given by the Society, a silver medal, was awarded to Herr Adolf Hauffe, of Tetschen; also for Cyprian bees.

ARISTOTLE called the queen bee *Basileus* (king); the Latins, *Rex* (king); and Shakespeare wrote: "They have a king."

THE tulip tree (*Liriodendron tulipifera*) commonly known in the Northern States as whitewood, and in the South as poplar, is being introduced in Germany. The *Frauentorfer Blätter* says it flourishes in all localities, and also states that in the fall the leaves become wholly of a golden-yellow color, which, seen from afar, constitute a wonderfully beautiful sight."

HERR G. DATHE is the author of a work entitled: "Introduction to the Culture of Foreign Races of Bees, with Especial Reference to the Italian Bee." In his last edition, issued this year, he still gives the preference to the Italian race. His objection to the Cyprians is that they are not as docile as the Italians; but he does not adduce very good proof of the correctness of this view.

THE August number of *L'Apiculteur* (Paris) states that the work of preparation for the Exposition to be held next year is progressing, and that exhibitors in Class 83 (apiculture, silk culture, etc.) would receive during August, letters of admission, assigning them somewhat less space than was solicited. The arrangement of the semi-rustic pavilion designed to receive the entomological products, collections, and instruments, is said to be convenient, but the space allotted is small.

"SALICYLIC acid cures foul-brood, but besides being expensive and not always obtainable, it has the property of removing the aroma of the honey to which it is added, thus injuring the quality of the same. Carbonate of soda does not injure the honey with which it is mixed, and it is within the reach of all. An apiarist in Loiret, informs us that he cured his Italian bees of foul-brood by the use of wood ashes. He has promised to give us his method of applying them."—*L'Apiculteur*.

AFTER giving notice of an exhibition of flowers *Der Elsaessische Bienen-Zuechter* very sensibly remarks: "We cannot refrain from calling the especial attention of all Alsatian bee-culturists who are also florists, to the exhibition so closely related to apiculture. According to our most unprejudiced view, floriculture and apiculture should always go more hand-in-hand. At a florist's exhibition it is quite as proper that the various sorts of honey should find a place; as that at a bee-culturists' exhibition there should be a selection of beautiful plants and flowers."

A BRAZILIAN PLANT.—"One of the most important trees of Brazil is the Carnauba (*Copernicia certifera*), a palm which grows wild in the provinces of Cera, Rio Grande del Norte, and others, and which, during the severest droughts, always remains green. All of its parts are useful—the roots, trunk, fibers, the edible pith, from which wine, vinegar, sugar, and a gum similar to sago, are obtained; the nuts, the dried bast from which huts, mats, brushes, and brooms are made; and, finally, the leaves, which furnish a wax used in the northern provinces in the making of candles, and which is largely exported."—*Bienenzeitung*.

WHEN a few hundred of those jolly German bee-keepers have finished one of their "big bee-talks," they have a great dinner, with music and toasting, and oftentimes close with an excursion or a musical entertainment. At the recent convention held in Tetschen, Bohemia, one of the toasts was: "Long live our beautiful Austria."

ADAM GRIMM.—"Bee-culture is not, after all, such a miserably small business. This has been proved by the late Adam Grimm, of Jefferson, Wis., U. S. A., who left behind him the handsome sum of \$100,000—according to our money, about 210,000 florins—which he had accumulated solely and alone through bee-culture. In far-end Europe one would run the risk of being shut up in an insane asylum if he should but let fall the idea of obtaining a fair living from bee-culture. Grimm took right hold of it though; he united German thoroughness with genuine Yankee energy; this is shown by the 1,400 stocks on hand at the time of his death. Entertaining the correct idea, namely: that bee-culture has for its aim only the production of honey and wax, he was, as are most of the American bee-keepers, almost wholly a honey-producer. Grimm was born at Hohenbrunn, near Wunsiedel, once belonging to the so-called 'Sechsaemtern des Egerlandes.'"—*Bienenwatter, Prague, Bohemia*.

### The Cyprian Bee.

FROM "DER BIENENVATER;" TRANSLATED BY FRANK BENTON.

As is well known, I have at various times bred in my apiary the best known races of bees. After I became aware that there were great difficulties in the way of keeping the races pure, and that the resulting confusion easily became great and costly, I believed that the preservation of the purity of the Italians as a very desirable race, was all that need be wished for; after I had convinced myself, also, that the Krainer bees were not a whit better than our native heath bees; and after I could confirm the expressed opinions concerning the Egyptians, I felt not the least inclination to procure and cultivate still another race, though the favorable of Chancellor-Director Cori, of Bruex, relative to the Cyprian bee, as also the epistolary communications of friend Hilbert, might well have induced me to do so. Meanwhile, Herr Cori's articles appeared in the American bee papers, the result of which was that an American bee-keeper addressed a letter to me requesting me to procure for him one or more pure Cyprian queens; and, if necessary, he was even inclined to bear the expense of a journey to the Island of Cyprus, for the sake of coming into possession of some pure Cyprian queens. Since, for my part, a journey to Cyprus for the importation of the Cyprian bee was not to be thought of, and as the worthy American must have placed a very high estimate on pure Cyprian bees, I resolved to apply directly to Herr Cori, of Bruex.

In answer to my inquiry I received word that in May of the following year, I could obtain the wished-for queens. When, however, May arrived the case was somewhat different. Upon inquiry about this time I

was informed that I could procure of Count Kolowrat, at the castle of Kroby, in Bohemia, two pure Cyprian queens as a present, if I did not fear to take them from his stock which was somewhat affected with foul-brood.

It was a ticklish thing for me. What if, in this undertaking, I should import this terrible disease, which, up to this time, I only knew through hearsay.

However, I concluded to risk the matter, because I had great confidence in the working of salicylic acid, concerning which as a remedy for foul brood, I had already corresponded with Hilbert. Therefore the two Cyprian queens arrived shortly—and, indeed, in the finest possible condition. Their majesties were enclosed, together with numerous companions, in two little caskets, such as Hilbert has constructed for transportation. Very few dead bees were to be seen at the opening of the box. During the journey the bees in both boxes had built comb, and the queens had started brood, so that many eggs and larvæ were to be found in the comb.

Both nuclei I placed upon a distant stand and then allowed them to fly. After some days I removed the queens and introduced them according to my well-known and sure way to two very populous colonies. Then I prepared also two small nuclei for queen-rearing, and placed in each brood, bees and honey from the caskets.

These nuclei immediately formed queen cells, which I used later. The stocks to which the queens had been introduced, as well as the nuclei, were treated, according to Hilbert's method, with salicylic acid, and not a trace of foul-brood has shown itself till then. I could now venture to send one of the old pure queens to America, keeping meanwhile the other, which I could not well part with. Owing to the small number of pure drones I only succeeded in rearing two purely-fertilized queens.

The colony with the imported queen was especially diligent, gave a large return, and with the remainder of the stocks, was in good condition for winter. The wintering and development during the next spring left nothing more to be wished for.

After having carefully observed the Cyprian bee—pure as well as hybrid—I have come to the following conclusions regarding the same:

1. The diligence or the Cyprians is at least equal to that of the Italians; indeed, as regards economy within the hive the former have the preference, because they are less inclined to build drone comb. The same peculiarity is noticeable also with the hybrids.

2. In their purity they are certainly more beautiful than the handsomest Italians. Those who visited my apiary were always much surprised as strong stocks filled with these beautiful bees were opened and masses of the insects rolled out so peaceably.

3. When rightly handled, they are not more or not less inclined to sting than the Italians.

Without doubt, Count Kolowrat, as well as Herr Cori, are deserving of great credit for importing this race of bees.

C. J. H. GRAVENHORST.

Braunschweig, Germany.

## Our Letter Box.

Lansing, Mich., Aug. 6, 1877.—“The Bing ham smoker is the best I have tried. Comb foundation is a grand success.”

A. J. COOK.

Canajoharrie, N. Y., Aug. 4, 1877.—“With us the weather is wet and cool. Queen rearing tedious and uncertain and honey crop very ordinary.”

J. H. NELLIS.

Grand Meadow, Minn., Aug. 7, 1877.—“Bees are doing heavy business. Three of my swarms have already multiplied to 19. One of my first swarms having sent out two more, and the first of these will swarm again yet. They are rolling in honey.”

C. F. GREENING.

Franklin Co., N. Y., Aug. 6, 1877.—“We have not much honey here this season, and no white clover. The first part of the season was very dry. And now ‘hoppers’ are threatening the buckwheat.”

CLEMENT McDERMOT.

Moore's Hill, Ind., Aug. 5, 1877.—“Bees are not doing as well as last year. I wintered 30 colonies without loss in a frost-proof house; sold 14 this spring, leaving 16 not very strong colonies. I have taken 45 lbs. on an average from each hive—one-half each comb and extracted honey. My bees are all Italians.”

J. W. JOHNSON.

Crawford Co., Mo., July 28, 1877.—“I now have 25 colonies in a bee house; have taken 100 lbs. of comb honey in frames from two-story hives. I think we have a good location for bees and honey. In Feb. the wych hazel blooms for pollen, and we have abundance of bee feed, such as blood-root, bluebells, maples, elms, willows, whortleberries, apples, locusts, cherries, clovers, mints, sumac, linn, basswood, golden-rods, asters, etc.”

JOB HARMON, Sr.

Green Bush, Wis., Aug. 4, 1877.—“I feel disposed to enter my protest against the mode of introducing queens as recommended in the July number, page 235. I followed it as closely as possible, and now the result is I have lost at least 50 per cent. of my queens, besides setting robbers to work furiously. I am not yet certain but that I have lost 6 choice queens—5 very fine ones received from H. Ashley, of Wenham, Mass., and one from A.H. Hart, of Appleton, Wis. I have one now caged and placed in comb, as recommended in the Aug. number. I await its result.”

JONATHAN STODDARD.

Mentor, O., Aug. 8, 1877.—“The honey season has been very poor here, but little surplus and no new swarms, except in a few instances, and they have no honey, and the old ones are rapidly eating up what they have. White clover was abundant, but the nights were cold and the days very windy, and the bees only made about 15 days' work on it, and light days at that. Basswood blossomed full, but only yielded honey 4 days, although the blossoms lasted 2 weeks. Fall forage will be scarce unless it rains soon, and heavily; everything is drying up.”

E. M. JOHNSON.



Modesto, Cal., July 28, 1877.—"The Bingham smokers came all right. I like them far better than I do the Quinby."

J. F. FLORY.

Verona, N. Y., Aug. 6, 1877.—"Bees came through the spring all right, but did just nothing on apple blossom. Our honey crop will be rather light."

R. BACON.

[We learn with much regret that friend Bacon has met with an accident which has laid him up on a bed of pain—his leg being broken. With his active mind and natural energy this forced inactivity must be very irksome, and we trust it will be only of short duration.—ED.]

Barren Co., Ky., Aug. 12, 1877.—"As I am interested in bee-culture and need all the information I can get on the subject, I shall take pleasure in putting up your posters, and in getting the "Dzierzon Theory," as you offer. My bees have not done very well this season. I think it has been too wet and cool for them; they have made an average of 23 lbs. to the hive, and increased in number 100 per cent. I am a regular reader of the JOURNAL, and will just say:

Next to the Book,

Of life eternal;

Is A. J. Cook,

And the A. B. JOURNAL."

N. H. HOLMAN.

Tama Co., Iowa, Aug. 6, 1877.—"Bees are doing well this season. White clover is in abundance. I hope to take 1,000 lbs. of honey this year. I had 35 colonies this spring. I now have 83 stands, having sold 8; they furnished hives to put them in, making in all 91 colonies. I use the Langstroth hive. My colonies are all very heavy. Every one has honey enough to winter on. I can sell my honey here readily for 25 cts. per lb. My bees are mixed Italians and blacks; I would be glad to Italianize more. I have some new swarms that have stored from 20 to 50 lbs. in boxes. I have one colony that has swarmed five times this season; and the first swarm that came out swarmed once, making 6 from the original one. The old hive has a 5-lb box of honey, to date; the first swarm has 30 lbs., and the second, 10 lbs. As buckwheat is just coming on, what they may yet do I cannot tell."

M. A. NEWCOMB.

Brown Co., Wis., Aug. 20, 1877.—"I cured foul-brood in three of my hives by simply using soda and borax; one teaspoonful of each in two cups of warm water, dissolved well and applied as usual. I used one of those small steam atomizers, which doctors use for throat disease. It saved a great deal of time, and was more convenient, for I could set the atomizer on a box, and have both hands to hold the frames with; and it could be thoroughly sprayed in a minute or two."

Mrs. J. S. DUNHAM.

Tipton Co., Tenn., Aug. 20, 1877.—"Bees did very well until the last week in May, when the heavy rains set in, which continued until the present month. During the first weeks of May my bees gathered as much as 1½ lbs. of honey per colony in a day. Since then I can't see that they have gathered any."

D. E. HAYNIE.

Portland, Me., Aug. 23, 1877.—"I had from one of Mr. Dadant's imported queens two very strong, artificial swarms, besides about 30 lbs. of box honey, being surrounded with fog half of the season."

JOS. A. DIRWANGER.

Monroe, Wis., Aug. 25, 1877.—"Enclosed you will find 75c. for another pound of yellow comb foundation. I was very much pleased with what I did order, my bees went right to work in earnest—cells all full of eggs."

WALLACE E. CONNETT.

Garden Plain, Ill., Aug. 27, 1877.—"Bees are doing well now again. The season has been on the whole too dry for a good yield. What is the prospect this fall for the honey market?"

R. R. MURPHY.

[If the market is not forced we have no doubt but that it will rise later in the fall. Prices now rule from 15c. to 17c. for new comb honey, and from 7c. to 9c. for extracted.—ED.]

Poolsville, Ind., Aug. 20, 1877.—"The materials that give me the best volume of smoke and the least trouble, are cotton rags and coarse hard-wood sawdust. Roll the sawdust in the rags. I use the Bingham smoker."

J. A. JOHNSON.

Houston, Minn., Aug. 27, 1877.—"MR. T. G. NEWMAN: The first part of the season here in Minnesota bid fair for a good honey crop, and in July our bees put in some surplus from linden and clover, but since August it has been very dry and hot, so very little honey has been secured. We had a fine shower last night, and if we have plenty of wet we may get some surplus honey yet. In all probabilities, Minnesota will not be able to supply her demand, if prices remain where they are."

"Can you refer me to some one, south of here, in the Mississippi Valley that is raising honey, and can supply me with a stock for retailing this fall and winter?"

NELSON PERKINS.

[Will some one in the locality named write Mr. Perkins, giving him facts and figures?—ED.]

Wyoming, N. Y., Aug. 16, 1877.—"Our honey season has been a short one this year. I have taken 1,400 lbs. of comb honey from 30 colonies. No buckwheat yet."

GEO. W. STANLEY.

Brown Co., Wis., Aug. 27, 1877.—"MR. NEWMAN: Thanks for your kindness in sending me what I wanted. I am pleased with everything. Bingham's smoker is exactly what it is said to be, and reduces the labor wonderfully in working with bees, though I have but 25 hives. The foundation is the first I ever tried, and works wonderfully well. I received it by mail at one o'clock this afternoon, and inserted it in the hive between 3 and 4 p. m., and when I looked at it next morning at 9, it was built out ¾ inch in thickness; and so thin was the base of the cell that you could see through it. The Chapman extractor has arrived and works finely. I only regret not having ordered it earlier in the season."

Mrs. J. S. DUNHAM.

Shelbyville, Ky., Aug. 23, 1877.—“Bees have done first-rate. I have taken 300 lbs. from 6 stocks, and increased to 13. My Italians are far superior to the spiteful blacks.”  
GEO. T. HORNING.

Prairie du Sac, Aug. 23, 1877.—“I have 12 colonies of black bees, but have no extractor. I intend to get one in the spring, and also to try the foundation in surplus boxes.”  
H. G. KING.

Youngsville, Pa., Aug. 18, 1877.—“FRIEND NEWMAN: My 170 colonies of Italians are wading into the buckwheat with a zeal that does one good to see. No black bees for me. I tried them 20 years, and know whereof I speak, Mr. Potter or any other man to the contrary, notwithstanding.”  
W. J. DAVIS.

Madison, Ark., Aug. 24, 1877.—“The queens I received from Mr. Henderson are as beautiful as any I ever saw direct from Italy; they produce fine workers; for beauty and purity they are excelled by none. The untested queen that he sent me produces very fine workers. We have one of the finest bee locations in the U. S. Our honey season commences in March, with the bud bloom, which is excellent for pollen; then come the fruit trees, and in April and May the poplar, which grow in abundance, and the rosin-weed. These are instrumental in causing swarming in May. We are troubled very little here with moths, in fact none where colonies are kept strong. We have basswood or linn, tulip, gum, cypress, and catnip, in abundance, and a kind of swamp mustard that is a rich honey plant; then the smartweed and various other blooms equally as good. In fact, bees have good pasturage here from March 15th to last of Sept., and sometimes until Christmas. I have seen cotton bloom on Jan. 1st, and on Christmas day, 1875, the peach trees were in bloom. Bees give an average of 50 lbs. of surplus per hive every year here. This has been rather a poor honey season on account of rain.

“I use a hive of Chas. Reade’s construction. I prefer it to any that I ever saw. The brood chamber contains 9 frames, 12 in. square. It is so constructed as to use supers if desired; the cap contains 9 frames 12x7, and if desired, can, by removing the sides, be made double this size; we do so when Italianizing. There is not much danger in getting the queens purely mated. There are several bee-keepers here, but they know little and take less interest in their bees, they keep them for home consumption. The old log gum is used mostly here. We have a home market for our honey here, extracted at 15c., and comb at 20c. per lb.

“I wish to know what is best to feed bees to make them produce comb.”

JOEL L. RICHARDSON.

[Feed them good honey; wax is the fat produced by feeding nutritious food. It takes from 15 to 25 lbs. of honey to produce one pound of wax. Wax exudes from the folds of the abdomen of workers; thin flakes or scales form and are removed by the bees, and used for constructing comb. Good, rich food is therefore essential.—ED.]

Kenton, Tenn., Aug. 24th, 1877.—“Had a fine swarm of Italian bees to come out yesterday; they are doing well.”

J. W. HOWELL.

Benton City, Mo., July 23, 1877.—“Our bees are getting along very well, so far as brood is concerned, but are not gathering much honey. The spring was so wet that we lost all peach and apple bloom. White clover did but little good. Had some willow, but no honey-dew. Our harvest has been a poor one up to the present time, but we have now a very fine prospect for fall harvest, and I am trying to have my bees in condition to take their share of it. I am Italianizing, and find it very difficult to introduce a virgin queen; my bees kill them as fast as I put them in. I lost 16. Why is this? I use all the precaution on my command.

“I sent to Dr. Brown, of Augusta, Ga., for a nuclei with imported queen, but owing to a delay in the express, they were in bad condition. The queen did not lay for two weeks, although I built them up strong. Now she is a very fine layer, only she avoids drone laying. Until recently, I could not get any drone eggs—the very thing I wanted. I had suppressed all black drones. She is a very fine queen and I am well pleased with her. I put two sheets of Italian drone eggs in the top story of a black hive, the bees removed every drone egg, leaving worker eggs.

“Why are some Italian workers gray romped, and some black-steak romped—all from the same mother, and all showing the 3 yellow bands? Why is not a queen reared in nuclei as large and good as when reared in a full colony? Why are they differently marked?

“Why does a drone rub its head and eyes before leaving the hive? Why are they differently marked—all from the same mother?

“I use a queen nursery, after the plan of Nellis.”  
P. P. COLLIER.

[A queen cell or young queen just emerging from a cell is usually received with favor after the old queen is removed and all other queen cells destroyed. It would be well to sprinkle with sweetened water or smoke them well, and try again.

The bees removed the drone eggs no doubt because *they* did not desire to have drones, though *you* wanted them.

Some impurity in the stock will account for the varying in color, etc.

Drones doubtless rub their head and eyes before leaving the hive for the purpose of being the better able to perceive a queen on her bridal trip. The head of a drone being nearly all eyes for that especial purpose.—ED.]

Dundee, Ill., Aug. 14, 1877.—“I have increased my 6 colonies of bees to 20, which are all quite strong but 2. One of these had a very curious-acting queen; she did not commence laying until long after the others, and then the eggs were very few in the combs. The bees have now killed her and are building queen cells.” F. PERRY.

## Correspondence.

For the American Bee Journal.  
**Comb Foundation.**

MR. EDITOR:—Now I have brood in all stages in combs made on foundation. Mr. Root has said that any foundation that stretched was impure. I put mine in a frame  $4\frac{1}{2}$  in. deep by 23 in. long, attached at the top, with  $\frac{1}{2}$  in. space at ends and 1 in. at bottom. It stretched up and down till the cells looked oval, in only this shallow depth. I sent my wax to Mr. Nellis to be made up, and he assures me this foundation is from my wax. I believe him. I put the sheets in  $21 \times 3\frac{1}{2}$  in., and as straight as a board, but when the heat of the hive struck them they not only sagged, but warped or kinked. No doubt bee-keepers can devise ways and means (as perhaps many have already) to make the foundation hang true; and no doubt bees will work them out, but whether they will be found of profit as a wax economist, is yet to be tested by years of its use.

Mr. Editor, you can set me down as an  
 ITALIAN BEE MAN.

I am as ready to speak their praises, as I have been to tell their faults. I now have what I call my fifth distinct strain of Italian blood. This strain differs distinctly from the other four, in this way: the queens are smaller, longer proportionately, darker—leather colored,—and the workers the same, besides they are much more docile, and better workers than any Italians or blacks I have seen before. They go into the little boxes just as readily as black bees. One peculiar point is, that hybrids from this strain and blacks are just as peaceable as pure Italians. These bees are much handsomer than any others I have had, for "handsome is, that handsome does." I keep bees for the honey they produce, to spare. I keep them for profit. I do not wish to sell honey at prices that will make me rich and deprive the people of enjoying the luxury. On the other hand I do not mean to get excited over some new (to me) development and come to the conclusion that I can sell 1-lb tumblers for 15c. with 10 per cent. off, and take my pay in groceries at that.

By the way, let me say a few words about  
 THE HONEY MARKET.

California is crippled nigh into death, it seems. Will not this lesson teach all of us to sympathise with each other and look out for breakers awaiting ourselves. As I wrote you in a previous article, Cass county has had her bees starve by hundreds of colonies all summer long. As is well known, I have done little to excite production of honey, and much to create demand, for one who only produces and sells his own crop. Bee-keepers, have I worked for or against your interest? Why should it be the duty of every bee-keeper to help outsiders into this business, while he goes about trying to crowd his honey into an already-glutted market, at the same time "looking daggers" at his neighbors' honey just in ahead of him; and even go so far as to intimate adulteration on the part of his neighbor and friend.

Two milk peddlers here are "running" each other. They are delivering milk, at a convenient hour to us, at 3c. per quart; all to spite each other, not to help us any. We sit back and drink milk and sing: "Here's two fat geese my cunning brothers, you pluck one and we'll pluck t'other." Of course one of these men is sadly to blame. Don't let any of us represent that man. We don't want to "put up jobs" nor combine and "corner" the market, if we could, but we want a fair competition and no spite work. Don't come to the conclusion, after a few years of honey-raising, that you can produce honey at 1c. per lb. Remember that it is small draughts that intoxicate the brain, and that you will ere long have to swallow something that will sober it again.

I think Mr. Root did wrong in advising honey-producers to sell their honey early. In many places in this State that advice has been hastily followed, and every time the result has been over-stocking and a sudden decline in prices. I am not going to offer a pound of honey at present. I believe the late market will be the best. I see nothing to prevent it, unless a grand early panic to get rid of the "drug" demoralizes it.

In my opinion every man who has put a pound of extracted honey on the market that was not all capped over and thoroughly ripened before it was extracted, has done himself and honey-producers generally a great wrong. In one minute you may prejudice a customer against your wares so much that it will take you years to undo the mischief. I look upon my stock of extracted honey about as I do a bank check. Why? Because it is honey in every sense of the word, and not nectar. It was capped before extracted.

### OUR HONEY CROP.

Mr. Editor, you have printed my whistle, but I "whistled" before I was out of the woods." Our basswood crop was only a partial one, as it cut right off on July 16th, giving us but 13 days of yield, only 10 of which was good. Can you tell us why we are going to get no more honey from 240 colonies than we have before realized, in no better seasons, from 50 to 75 colonies? We have worked the bees as closely as of old. A bee-keeper of 40 years' experience, a sharp and close observer, says he has ever noticed that the fewer bees kept in a locality the better they did, down to 4 stocks. He says that I am entirely over-stocked at my home apiary of 140 colonies. I think so too, writers to the contrary not withstanding.

### SLATE REGISTERS.

Your slate registers strike me as among the few supplies that pay the money back.

### FIXING A PRICE FOR HONEY.

Cannot the bee-keepers of this country establish a minimum price for honey, somewhere about the cost of production, and let those who are favorably situated get all they can and think best to take, while this fixed price will serve as a guide to a large number of producers who do not seem to know anything about what honey does cost. I find that consumers pay whatever is asked, and why can't we have something to say about price, as well as honey dealers? Our business is an uncertain one, and it seems to me we should be laying something aside for a "rainy day," or as California

bee-keepers would say a "dry day" or so. A bee-keeper works harder than a farmer, and will wear out quicker. The "enthusiasm" that Prof. Cook says characterizes them, proves how hard they work with the mind as well as body. Reverses are as necessary to our welfare as success.

JAMES HEDDON.

Dowagiac, Mich., Aug. 4, 1877.

For the American Bee Journal.

### Read This.

As some of your readers are having rather hard luck with the Italian bee, I send the following story for their especial benefit. Mr. S. G. Rose, of Bluff City, Ill., purchased a queen of me in 1876, and here are his own words as to how she has done. In ordering more queens on Aug. 1st, he wrote me thus: "I have six fine swarms from the hive I put that queen in, 54 lbs. of extracted and 30 lbs. cap honey up to July 25th. Who can beat this? Blacks did nothing."

That is the biggest bee story that I ever heard off this side of California. Now this is a very good report from one of those "yaller" drone-laying queens. Who can beat it? That was one of those \$1 queens, and I don't think she would have done much better had I received \$10 for her. As I have said before, it is not the price of the queen, but the quality. I am aware that all queens, no matter what the price is, do not come up to the one above spoken of. Then again, it is not always the fault with the queen or hive if a stock don't do well, but a combination of faults.

H. ALLEY.

Wenham, Mass.

For the American Bee Journal.

### Larvæ of Queens and Purity of Drones.

Bees described by Virgil and Aristotle were a myth. Italian bees were first discovered by Latourel and Vinteghria. Baldestein first imported a queen from Milano to Bern, Switzerland, in 1842. In 1851 they were introduced into Germany. In 1859 they were brought from Sicily to New York by Mahan, Parsons, and others. In the Island of Madagascar and Cypria there is found a species of bee called, as near as I can tell, *Aphis unicolor*, having five bands, with dints at side, and of a golden color.

The Cyprian bee was never into America till 1876. The honey produced by them is of a red color, but becomes dark by getting old.

Great numbers of bees are kept in Cyprus Island, and Candia. The natives hollow out trees for them, laying them down lengthwise, or tying them up in trees to keep the bears from eating the honey.

How do you tell the purity of the Italian drone? From what I have seen, I think drones that are three-banded are not pure; but if reared from a queen of pure race, whose progeny are all exactly alike, be she light or dark in color, the drones are pure; even if she meets a black drone, and her progeny become hybrids, her drones are pure.

A pure drone is one that has only one band and two others with dark spots, and

spots on the sides. I have tried putting them in alcohol, then you can see them plainly.

When combs that contain eggs or larvæ are given to nuclei hives to rear queens, why do bees eat larvæ or eggs? The royal cell or queen eggs laid in royal cells are fed the larvæ of workers or eggs. Why is this? Eggs or larvæ are an ingredient of royal jelly. Suppose we give a card of comb containing eggs to rear queens from, to a colony of black bees—will that queen be pure? We say no. The black bees impart a taint to the young queen, and the queens are not pure, but  $\frac{3}{4}$  this stock.

Vermont, Ill.

HARDIN HAINES.

For the American Bee Journal.

### Experience with Comb Foundation.

Most of us have such a mental make-up, that however strong may be the testimony given by others as to a fact, we do not believe it quite so fully from their testimony as we do after seeing it for ourselves. Nearly all the reports spoke favorably of the comb foundation, but I wanted to have the evidence of my own eyes, so I sent for a few pounds to test. It came by express in good condition. It was a good, thick, yellow article, and, from appearance and odor, seemed to be made of pure beeswax.

On the day the package came the bees were gathering rapidly from white clover. I filled a frame with foundation and put it in the midst of a strong colony at about 5 P. M. After breakfast the next morning I examined it, and found it all nicely started into comb, the cells over the whole surface of the sheet being built out nearly half their length. Just before 10 o'clock that night—being 24 hours after the foundation was put in—I found the comb still further completed, and had the luck to find the queen on the comb, apparently inspecting it, for she walked deliberately over it, and seemed to be examining it. I did not observe that she had then put any eggs into the cells. But the next morning—36 hours after the foundation was put in—there were plenty of eggs.

Being my first experiment with foundation, I took particular pleasure in watching that frame of comb. It filled the frame, except the usual space at the lower part of the sides and at the bottom. Of course, all were worker cells. The queen soon had it filled with eggs away out into the corners. In due time the brood was capped, and hatched, and now it is again filled.

Since then I have had quite a number of frames of foundation built out just as quickly, and as freely occupied by the queen. The comb so built seems to be thicker and stronger than that built in the usual way by the bees. The foundation has a tendency to stretch slightly in a vertical direction, hence I have found it best to let the foundation be at least  $1\frac{1}{4}$  in. shorter than the depth of my Gallup frames; then it does not stretch to the bottom, and there is no danger of bulging. It is best to have the foundation extended across the frame to about half way down from the top, so as very nearly or quite to touch the sides of the frame. Then the bees fasten it at the sides sooner; but if it is left an inch or more from the sides they are sometimes slow about building it out laterally. Hav-



ing some nice pieces of foundation that came more than half way down the frames, but lacked more than an inch of coming out to the sides, I found that the bees at once built this foundation into comb, and filled it with brood which was sealed before they chose to fill out the side spaces.

It is essential that the hives be carefully leveled before putting foundation in. A small level, which answers a very good purpose, can be bought at a hardware store for 25 cts. It is best to do this leveling with care, making the hives perfectly level both ways, then the foundation will be fastened by the bees to the centres of the side pieces.

In my frames there is a small slat for a comb guide, which fits into a groove in the underside of the top-bar and into a notch in the upper end of each of the side-bars. I have fastened the foundation by laying the frames over a board which just fills it up to the comb-guide, laying the foundation on this board and pressing it down to the top-bar, then by means of a knife-blade heated in the flame of a lamp, melting the foundation at several points, so that it adheres strongly to the comb-guide. This can be done quite quickly and has answered well in nearly every case.

One very hot day I put some frames of foundation into a strong colony, and on looking next day found that in two frames it had fallen to the bottom. On taking it out I found that quite a large space towards the bottom of each sheet had been partly built out into comb before the sheets had broken loose from their fastenings. May it not be true that in so warm a day it was comfortable for the bees to work near the bottom of the hives, and that so many bees congregated on the lower part of these sheets that their combined weight and the heat was the cause of the sheets falling down before the bees had fastened the foundation to the comb-guide?

My experience thus far is strongly in favor of comb foundation. The bees draw it out into comb readily and rapidly; the queen fills it at once with eggs; it gives frames of solid worker brood to the very corners; the brood prospers in all respects as well as in comb built by bees without foundation. It seems to me that it is a very important discovery in bee-culture.

O. CLUTE.

Keokuk, Iowa, Aug. 10, 1877.

For the American Bee Journal.

### Dollar Queens.

Mr. Dadant labors rather hard to impress upon the minds of bee-keepers that imported queens are superior to the home-bred ones. I cannot see where he has gained a point. How it is that queens raised in Italy can be better than those raised in America under the same circumstances, is more than I can make out. Mr. D. has an idea that queens can't be raised for \$1 each, that is, good ones. Now Mr. D., how much more than \$1 each does the Italian or Dutchman get for his queens of whom you purchase them? It strikes me that the dollar side of the question is not all on this side of the water. I claim that the dollar part of it has nothing to do with the quality of the queens.

We have paid as high as \$2 per bushel for

corn here, now we get it for about 65c. The corn is just as good as that that cost us twice as much, but the producer don't get as much for it. The manner of rearing the queens is the point. Mr. D. has much to say about queens raised in nucleus hives. The best, largest, most prolific, long lived and the finest queens in any respect that I ever saw were raised in small nuclei hives—say hives that will hold 3 pints of bees. Now there is a way to raise good queens in nucleus hives and there is a way to raise inferior ones. Beginners cannot do it, and to raise good queens a man must have considerable experience. It is a trade to learn, the same as in everything else.

How do we know that all the queens raised in Italy or Germany are not raised in such hives? I wish some of those who have purchased such queens would tell us about them. I have said something about home-bred queens, etc., in another column, and in the Aug. number of the JOURNAL.

Now if any of the imported queens have done better or even half as well, let me know it. If Mr. Dadant can afford to sell imported queens for about \$6 each, and make a profit, then the person who supplies him can't get much over \$1 each. It is a poor rule that don't work both ways; and if queens can't be raised for \$1 in this country they can't anywhere.

H. ALLEY.

Wenham, Mass., Aug. 8, 1877.

For the American Bee Journal.

### Raising Queens.

I will now fulfill my promise to give the JOURNAL our method of raising queens and making swarms. The raising of queens and making artificial swarms are so much connected with our general management of bees that we cannot give them without expounding part of our general treatment of bees.

After winter some colonies are weak, others are strong; but according to circumstances of food, weather, prolificness of the queens, etc., it sometimes happens that some of the weak ones gain strength, and are in June as good as those which seemed the best immediately after winter; yet fully 25 per cent. of the whole number wintered remain too feeble to give, in June, any surplus honey.

Amongst our strongest stocks we consider those best who have the best laying queens and most active workers. Generally, these colonies have given us in the preceding season a good crop of honey. We do not consider the color of the queens to be of the least value, if their bees are pure. Amongst these colonies we select, early in the spring, a few to raise drones. As we have replaced in all our colonies every drone cell by worker comb, we slip a drone comb in these selected hives, between two worker combs containing brood, and we feed these colonies to invite the queens to lay to their utmost capacity.

Now as all is linked together in the treatment of bees, I have to guard the unexperienced bee-keeper against a fault too generally committed—to feed in the day time. We feed after sun-down, and proportion the quantity to the strength of the colony, so as to have all disposed of before the next day. Our end in acting so is to prevent the killing *en masse* of the bees.

If you give the food in the day-time, or if all is not taken by the bees long before sunrise, the bees who find the food will fill themselves and give the good news to others. Of course some of the workers can imagine that honey is gathered inside the hive. There is honey in the fields they think, then every worker, after having seen the happy bees which have found the food, darts from the hive in search for honey. But there is no honey to be found in the fields; nothing but weariness, which is soon fatal to bees when they work with an empty stomach. If the weather is cold it is worse yet. The bees who leave the hive cannot come back, and are seen motionless, and half dead everywhere around the apiary.

If you feed the bees in spring, take care to give but little at a time, and for more security, shut up the hives till the agitation caused by the food has subsided, and thus prevent the bees from yielding to the excitement, flying out of the hive not to return. Sometimes, after the food has been regularly distributed for a few days, all the workers know where they have to look for it, and before flying out of the hive they visit the feeder. Then you can feed them in the day-time, without loss. But you cannot be too careful till all your bees have been accustomed to look where the food is distributed; for a great many colonies have been ruined by feeding intended to give them early strength.

Now I come back to my subject. Besides choosing colonies to raise drones, we also choose these from the brood of which we will raise queen cells.

As soon as we have a few drones hatching we divide our colonies into two parts, one of these parts, about 75 per cent. of the whole number, is strong enough to give honey. These colonies are left undisturbed, at least for the beginning of the season. By swarming these artificially we would diminish our chances of honey harvesting. By permitting them to swarm naturally, our chances of a good honey crop would be equally lessened.

To prevent these colonies from swarming we use wide hives. Our non-swarming hives have room for 11 Quinby frames, instead of 8; or 15 frames 12x12, instead of 9. Every non-swarming hive is supplied with one or two partition boards, leaving between them and the side of the hive, room where to put an empty comb. When the honey harvest begins, we look at some of these outside combs every evening. As soon as the bees begin to bring some drops of honey in these combs, we hasten to give all our non-swarming hives empty combs or surplus boxes, or both, to prevent them from getting the swarming fever, and we generally succeed very well.

The 25 per cent. colonies, too weak to give surplus honey in June, are intended to raise queens and make swarms. To this end we choose the most populous of these weak ones. We take out its queen and all combs containing brood; and brush from these combs every worker. Then we open one of our colonies intended to give brood to raise queens, and we exchange the combs of our weak colony for a similar number of brood combs; taking the same care to brush every bee from them before putting them in our weak colony. These combs having taken the place of those taken out, our

weak colony being deprived of its queen has no other brood but that of a selected queen to raise queens cells with.

By this method we do not incur the risk of introducing a valuable queen in another colony. This queen continues to lay, and nine days after, we can deprive another of our weak colonies of its queens, change the brood combs of this last colony with those of the selected one, and so on as long as we intend to raise queens. If we have a great many queens to raise we act the same as with one or more selected colonies. By exchanging combs every third day, we have every third day queen cells ready for any emergency. Three selected colonies are then used to give the brood.

Nine days after the exchange of combs, our first weak colony has mature queen cells. We open the hive and count them. Suppose their number is 4; we deprive of their queen 3 of our other weak colonies, and the next day we insert a queen cell in every one of them. If something has prevented us from taking the queens out on the ninth day, we do it on the morning of the tenth, and give queen cells in the evening, at least 6 hours after the taking out of the queens.

To insert the queen cells we do not cut the comb, but enlarge the space between two brood combs; we place the cell between them, and by bringing the combs in their place, the cell is held in position. The workers will cover and hatch it as well as if it was inserted in the comb.

If, instead of Italianizing, we intend to make swarms, we act differently. As soon as our queen cells are ripe, we divide our weak colony in as many colonies, or nuclei, as we have brood combs, giving every brood comb a queen cell. Then we divide the bees equally, giving to each a second comb with honey. If we have more queen cells than we have brood combs, we deprive another weak colony of its queen, at least 6 or 8 hours in advance. Then we divide equally that colony in as many nuclei as we have queen cells; dividing also the bees as equally as possible. We shut up these small colonies for 24 hours, then we put every one of them in place; we also move the old hive at night, before its bees are flying. Before opening the entrances of these hives we put in front of every one a small slanting board, so as to interrupt the direct flying of the workers when they leave the hive. The bees seeing something unusual at the exit of the hive are led to examine the surroundings of their new location; and the old workers returning to their old place, not finding the old hive, will remember their new location and return to it.

Now these small swarms have to be examined after about 5 or 6 days, to see if the queens are hatching; and in case some are dead or doubtful, another queen cell can be given, after the one started by the bees in the nuclei has been removed.

Generally after 12 days the young queens are laying. Then there is no more worker brood hatching. We give to every nucleus a comb of brood taken this time from some of our strongest colonies, as the eggs of bees need about 35 days before becoming outside workers. We do not diminish by this loan the gathering forces of these colonies; as the bees of the brood taken would be too young to profit from the spring

harvest. If we replace the brood comb taken by an empty comb, the queen will fill it with eggs, and these eggs will hatch bees fit for the honey crop of August.

Of course, in all these dividings of colonies it is understood that there is always honey in the combs, to prevent bees from starving and to promote breeding, in case of lack of honey in the fields. Bear in mind that there cannot be brood without honey and pollen. It is also understood that if these small colonies are lacking brood or honey, to become strong for the fall honey harvest, brood or honey, or both, are to be supplied from the strong colonies; which, having bees in full force, are able to spare one or the other, or both, without being the least weakened.

It is also understood that, as long as the honey harvest lasts, these small colonies ought to be managed as comb builders; for they make worker comb only. If they have been well cared for, every one of them will be strong enough in August to make its own provisions for winter. If the fall season is poor, some of them will prove unable to gather enough for winter; then an exchange of some of their empty combs with full ones of a rich colony, will be beneficial to both.

We have accustomed not to make more than one swarm for every two colonies wintered; i.e., 50 per cent. of the whole number wintered. Our importation and the raising of queens for sale prevents us from making a greater number of swarms; yet with good management and in good years, the number of colonies could be doubled.

You see that by our method all our strong colonies can give honey to their utmost capacity; while all our weak stocks are used to start swarms or raise queens.

Another good feature of our method is to raise all our queens and drones from choice queens; and to replace all our less prolific queens by daughters of our best, started in colonies strong enough to raise good queens—our aim being to always better the sale of our bees.

CH. DADANT.

### For the American Bee Journal. Notes from Kentucky.

FRIEND NEWMAN:—I enclose the following article on Bee-Culture, clipped from the *Herald and Presbytery*, by Rev. Dr. T. H. Cleland, of Lebanon, Ky., thinking it might be interesting to the many readers of the JOURNAL.

#### BEE-CULTURE.

What is sweeter than honey? Or what animal, bird, or insect affords a more wonderful, interesting, or profitable study than the bee? "Ten Acres are Enough," is a very interesting little book. But \$10 invested in bee stock will afford more pleasure and profit than \$20 in anything else. Many learned men, of great intellects, have devoted much of their lives to the study of this wonderful insect. There is such a fascination about it that it never fails to make enthusiasts of those who devote their attention to its culture.

#### IS IT PROFITABLE?

A few facts will best answer that question. Riding one day on the train with a

young man newly licensed and married, the conversation turned on bee-culture. He became deeply interested. Out of a very meager salary he devoted \$50 in bee stock. He got Quinby and Langstroth and informed himself about the nature and habits of the bee. I presume this year the product of his apiary is equal to \$500. The time necessarily devoted to their care is a most delightful recreation. But for his bees he could not live on his small income. A stand of bees given to a brother in the ministry, a few years since, is now worth to him several hundred dollars, and the enthusiastic delight he takes in their culture and study of their habits is worth ten times as much more.

During the late war, two things the soldiers always went for—onions and honey. They robbed me of every hive but one. At the close of the war I bought three hives—two old box hives and one Langstroth, of hybrids. That year the patent hive sent out three swarms, and the first swarm sent out another. In 3 or 4 years I owned 35. Part of these I sold, and reserving 20, moved to the country. The next year I realized more money from my honey than my whole farm. True, after this many of them fell victims to the "bee cholera." So that this year the season opened with only 14 stands, but now I number 36, with "honey to sell and to keep." Now how about the trouble? It has been to me a living pleasure, a most healthful recreation.

#### BEE-STINGS.

"Ah, but they bite—they sting me so terribly—I am afraid of them." Nonsense. "They have honey for their friends, but a sting only for their enemies." Get the Italian bees, and be kind and gentle with them. They will soon come to know you, and you to love them. An old Shaker once said to me: "If you will approach a bee with a *circular motion* they will not sting you." True, but the philosophy is not in the circle, but in the *deliberateness* of the motion. If you are afraid of them and allow yourself to become excited and angular in your movements, they know it in a moment, and take you for a robber, and pop you. But perhaps you are ready to say, "I can't help being nervous and excited." Yes, you can. You may easily shield yourself against them. Take a half-yard of tarleton and sew it up like a bag, leaving both ends open. Now run a draw-string—gum-elastic cord—in each end, and draw it over your hat, and the lower end under your chin, and your face is safe. A pair of gum gauntlet gloves on your hands, and they are safe. And now "though they compass you about like bees," they can't harm you any more than did David's enemies. You can afford now to be easy and gentle, and presently, 9 times out of 10, you will forget these appurtenances. You will not be afraid to go out among them, and to have a swarm of 40,000 without even a hat on your head.

I prefer the Italians. 1. Because they are much less liable to sting. 2. They are a larger bee, with a tongue one-third longer, enabling them to extract honey from flowers the little blacks can't reach. 3. They multiply faster. 4. They swarm earlier in the spring. 5. Work earlier and later in the day, etc. Many curious and very interesting facts touching their natural history,

habits, living and management, etc., must be reserved for a future number. T. H. C.

In the late war, one thing seems to be remarkable—the soldiers in most cases left one stand. In October, 1862, during the retreat of Braggs' army from this State, their rear was covered by Morgan's guerillas, and my bees were not taken till the third day; when the Morgan boys came up they went for them at once, taking all but the largest and strongest. I only had 9 stands at that time. From this one stand my increase was taken, which, during the last 10 or 12 years has brought me from \$500 to \$1,000 every year, except 1868—the year of the great bee cholera, that Dr. Clelland speaks of. Though I lost not a single stand with the cholera, I made no profit that year as it was a very poor season here. To prevent too much feeding, I doubled up 26 stands to 13, and wintered every one. The next season I increased to 52, and took 560 lbs. of cap honey—there being no extractor at that time. I sold the honey at 35 cts. My success has been—no loss in wintering, a good sale of bees every spring, besides honey for sale at all times. R. M. ARGO.

Lowell, Ky., July 7, 1877.

#### For the American Bee Journal. Dollar Queens vs. Imported.

From the last article of Mr. Henderson, it seems that dollar queens cannot be raised profitably with colonies paid to their real value. If so, somebody loses money in this cheap production. Mr. H. was offered full colonies in Langstroth hives, with 21 frames, for \$5.50, and refused, because he could buy cheaper. These parties were losing heavily, for the value of these colonies can be estimated thus:

Hive (21 frames).....	\$2.00
21 combs.....	2.00
30 lbs. of honey at 10c.....	3.00
1 tested queen and brood....	2.00
Net value.....	\$9.00

Then the dollar queen business wants that somebody loses money.

Now Mr. H. changes his batteries to direct them against imported queens, which had nothing to do in this controversy. He quotes Mr. Argo, who has imported impure bees. Mr. H. knows very well what has been my answer, and that Mr. Argo did not reply. The bees imported by Mr. Argo were not Italians, but Tyrolian bees sent as Italians by Ed. Uhle. I was informed of the fact by our late friend Nesbit, who was in partnership with Mr. Argo, of this importation. Mr. Argo will not deny the fact.

As to Dr. Brown, I have offered to him, to Mr. Andrews, to Mr. King, and I offer now to my opponent, to have an inquiry made in Italy about the purity of bees. If impure bees are found, I will pay the cost and give my opponent \$200: If no other but pure bees exist, he will pay the expense only. I

have received and sent imported bees by the hundred without testing them, and I have had so few complaints that I am satisfied of the fact. Most of the complaints came from queen-breeders, who owned the old kind of yellow bees.

Let us see how it is that some queen-breeders do not like imported queens. These breeders are few and amongst the sharpest. They have very yellow bees; some have queens yellow to the tip of their abdomen, and workers with four yellow bands. If a daughter of these queens chances to mate with a black drone, her workers will lose a yellow ring, but will have yet three left. Therefore this young queen can be sold as pure; although being as much impurely mated as possible.

Mating with a half-bred drone she will look purer still. The percentage of pure-looking queens raised from such a stock will be very great; not to say that every daughter of these queens will be pure as to the color of their workers. Of course as to the working and laying qualities, they will partake of both parents.

It is not the same with imported queens. Their progeny is darker, and the smallest mixture of impure blood in the drones who mate with their daughters will be visible on the workers. Hence the dislike of these shrewd queen-breeders for imported stock. The profits are greater with the yellow stock; that makes all the difference.

I could show many letters complaining of the small number of pure mating of the daughters of imported queens. If the drone, mating with the daughter of an imported queen, is not of absolute purity, the result is impure workers. On the contrary, if the drone mating with the daughter of improved yellow bees, is impure, the impurity will be drowned in the previous improvement in color.

I defy all the breeders and lovers of yellow bees to deny the above facts; for I can prove it by the letters of many of these hard-to-please breeders. Hence the yellow kind is better, and more profitable to the queen-breeder, while the imported is more profitable to the honey producer.

CH. DADANT.

For the American Bee Journal.

#### Chips.

One writer in the last number says that not much will be heard of the Italian bees after they have been excluded from the mails. You are mistaken, my good friend. There was a good deal said about them before any were ever sent by mail. He keeps black bees, and of course is behind the times. Try the Italians my good friend, and you will have reason to change your mind in regard to them. Your neighbor must have a pure lot of Italians, with black bees on your side of the fence and Italians on the other! Most bee-keepers owe their success to the Italians—so say all the bee papers.

BEEES BY MAIL.

Some time in July I sent 3 queens to customers in California. I forgot to ventilate the cages, and it did not occur to me that I had not done so until they had left the post-office. However, I had an idea that they would go safely. They were 8 days in the mail and laid 2 days in the office after they



arrived there, and then turned out all right. So bees do not need so much ventilation after all. We have sent out 500 queens thus far, and only 8 died during transit; and not one has been reported impure, and all who have said anything about them report that the workers are beautiful. Nine out of every ten who acknowledged the receipt of their queens wrote thus: "They are the handsomest queens I ever saw."

I am now registering orders for 1878. Already have 26 booked for next year. I hardly think that any of my customers have raised any black drones from the queens I mailed them. The idea that black drones can be raised from Italian queens is a queer one. Had I not started with 250 orders in the spring I might have filled orders as fast as they came in. I am hard pinched all the time for queens. I still have between 200 and 300 orders ahead, but hope ere this is read by my impatient customers to have them all filled. Have upwards of 200 queens at this time. It is impossible to fill orders by return mail in all cases.

#### THE SEASON

Has been the poorest for honey, and the most unfavorable for queen breeding we have had for many years. Have had ten days at a time when no queens were fertilized.

#### ITALIAN VS. BLACK BEES.

Here is a nut for Mr. Porter and Mr. Anderson to crack. I make the following extract from a letter received to-day from Mr. Jno. F. Hobson, of Winchester, Va.: "My bees have done very poorly this season, and not much better last. My bees are all black and I am tired of them. Others around here have the Italians, and make an average of 30 to 40 lbs. of honey per colony." A very good report.

I would like to say that nearly all my queens (except those in nuclei hives) were sent by mail, and I have no trouble in shipping them that way.

H. ALLEY.

Wenham, Mass., Aug. 14, 1877.

For the American Bee Journal.

### Various Topics.

#### WINTERING.

EDITOR JOURNAL:—We are, all of us, more or less anxious about wintering our bees, and desire to compare notes with those who have had success as well as failures. We have known veteran beekeepers become so confident in their successful wintering as to make a boast of it, and yet in an hour, so to speak, lose all their possessions in bees. We know of one such who lost once 100 swarms after several successful years; and the loss caused such a reaction of disappointment and disgust that he will not look at a swarm of bees, and is inclined to avoid the subject entirely.

That the kind of food has much to do in successful wintering is patent to every beekeeper. And the kind of honey my bees are now gathering leads me to write this, to obtain if possible a little information.

#### OUR HONEY SEASON.

The season has not been favorable for a large yield. Since July 20th the bees have barely made a living, and now buckwheat is giving but little honey. Observing bees winding their way to the forest, we follow-

ed them to their pasturage and found them at work upon honey-dew. It is generally the impression that this is deposited by aphides, but we found no insects upon the trees. The species of trees upon which it is found is beech and maple. The honey obtained is quite light-colored and of pleasant and I think slightly acid taste. As some of our swarms were quite scant of stores at the commencement of this yield, this honey will constitute their winter's stores.

Now, has any one had experience with this kind of honey for wintering? Is it a healthful food for the purpose? We hope to hear from those who have had experience with it.

#### COMB FOUNDATION.

We have given pure yellow foundation thorough trials, every way, and find it a decided success. Bees build it out quite rapidly for brood combs and the queen soon occupies it with eggs. For surplus honey the yellow foundation is drawn out and bleached to the whiteness of snow. Our choicest honey is in foundation, and the consumer cannot tell the difference between this and that built by the bees. We shall use it liberally another year.

#### WHITMAN'S FOUNTAIN PUMP.

At the commencement of the present season we purchased a fountain pump. We have to speak a word in its favor. It is good for controlling swarming, and we know of an instance where a swarm was brought down while in full career for the woods. We also find it very convenient for destroying drone brood. Put the rose on the nozzle, lay down the comb, force the water into the cells, and young brood and eggs will be thrown out.

J. H. MARTIN.

Hartford, N. Y., Aug. 15, 1877.

For the American Bee Journal.

### Introducing Queens.

I noticed in the July number of your valuable JOURNAL, a few lines from the worthy and reliable pen of Ch. Dadant, giving his idea of Bro. Alley's method of introducing queens; he seems to think that it is not a safe and reliable method. He says that he has given it a trial and finds that when honey is scarce, the weather cold, or the queen to be introduced is strongly scented with dysentery or from other causes, that it is not safe to introduce by this method.

Now as the object of your JOURNAL is to diffuse knowledge through the bee-keeping fraternity, I will try to give you my idea of introducing, hoping that some one may catch my idea and be benefitted thereby.

In the first place let me say that I have adopted Mr. Alley's method, with a few exceptions, and find it a success in the object to be gained—a quick, safe, and reliable method. Now in order for us to be quick, we must be safe. It has been most thoroughly demonstrated that queens are generally recognized by scent. Now I will give you my method.

First I prepare, by having a light box with a cover having air holes in the top covered with wire, a roll of cotton rags handy; then light the roll and blow some smoke into the hive (rag, not tobacco

smoke), at the same time rapping the hive a few times to frighten the bees. Now give them plenty of time to fill themselves with honey—say 10 to 15 minutes. Now blow some tobacco smoke into the hive to quiet them, and remove the frames until you find the old queen. After removing her, brush all the bees either into the bottom of the hive or into a box kept for the purpose—as before described. Now smoke the bees with tobacco until they are thoroughly scented and under the influence of smoke. Be careful not to induce vomiting by using too much smoke. This, like everything else must be learned by practice. The object of using the smoke is to scent them thoroughly and alike, and so stupify them that they will be insensible to the loss of the queen and will recognize the other as their own.

After the bees are in a proper condition, uncage the queen, let her loose with the bees, after blowing some smoke upon her; then mix the bees thoroughly, having the queen in the centre of the mass of bees. After allowing her to stay there a few moments, to become thoroughly scented, replace the bees into the hive, which finishes the operation. This is a perfect, speedy and safe method, and I am only too willing to adopt it. This is Bro. Alley's method with a few exceptions. It is very much like the method of A. C. Attwood—given in the July number. I dislike besmearing the bees with honey.

I am willing to guarantee 90 per cent. of all queens that I introduce by my method, at any time of the year, or any condition of the honey season, and regardless of how strong the queen may be scented.

There has been quite a controversy about queens and queen-raising. Let me say one word in Henry Alley's favor. I have been a frequent visitor there and have spent one week at a time studying with him, learning as thoroughly as possible all about bee-keeping. I have never seen him send an impure queen or one that was not well marked. He seems to take pride in furnishing the best queens possible. Also his queens used by me have produced the most beautiful and most active Italian workers that I have ever seen. I have just introduced a young queen from an imported mother lately purchased by him. I have always known him to be an honest, reliable and upright man, and I feel justified in saying that every person dealing with him will be used in a gentlemanly manner.

In smoking my bees, I use the Alley smoker, consisting of a tin tube about one inch in diameter, with a plug in each end,—one having a small tube  $\frac{1}{4}$  inch in diameter through it, and the other intended to fit the mouth. I use tobacco altogether, and like it best, because you can use both hands to work with.

I have kept bees for 7 years; have but few swarms now. I use the Bay State hive. The honey crop is poor this season.

Salem, Mass.

SILAS M. LOCKE.

Over two thousand tons of beeswax are used annually in England, at a cost of two millions of dollars. The "busy bees" have lots of work before them to supply this demand—as well as the constant and increasing demand in this country.

### For the American Bee Journal. The National Convention.

Mr. J. S. Coe has completed arrangements with the American Institute for the next meeting of the National Society. For full particulars we refer to the following letter from him. We hope bee-keepers will take an interest in this meeting and make it a grand success—one creditable to American bee-keepers in general. Especially would we urge upon our Southern friends to send in samples of their honey. We have a good yield from the honey-dew and poplar, let them be samples of each on hand. We believe that if the *fine* flavor of our poplar honey was better known, it would be *preferred* and command the best price in the market, notwithstanding its dark color.

W. J. ANDREWS.

MONTCLAIR, N. J., Aug. 9, 1877.

WM. J. ANDREWS, *President*:

Dear Sir:—I beg leave to state that under your instructions I have made the following arrangements for our coming convention to be held in the City of New York on Tuesday, Oct. 16, 1877:

The managers of the American Institute have granted to the American Bee-Keepers' Association, table space for the exhibition of honey and wax, and floor space for the exhibition of hives and all other aparian supplies.

One fee (\$7) only will be charged.

The entry is to be only for exhibition and not for competition.

Each delegate to the convention will receive three single admissions—usual exhibitor's tickets.

H. K. & F. B. Thurber & Co., agree to receive all aparian products and supplies to be exhibited by the American Bee-Keepers' Association at the American Institute in New York, and have them all properly arranged for exhibition *free of charge*.

If notified by letter or telegraph, of the shipment of honey they agree to have it removed by *careful hands* to the exhibition building, so that it shall not receive damage.

They agree to pay the highest market price for the honey and wax at the close of the exhibition, and account for the same to the party making the shipment.

I have procured the use of a hall in which to hold our convention, free of charge.

Arrangements are made at the Brigg's House, near the Grand Central depot, for the accommodation of our delegates, at greatly reduced rates—lodging, 50c. per night; meals, from 25c. to 75c.

So far, no reduction has been obtained on railroad fares.

Exhibits should be sent in by the 12th of September, or as soon after as possible.

All exhibits consigned to Messrs. Thurber & Co. will be transferred from the depots and piers by experienced hands, and placed in position in the Institute building free of charge. And after the fair they will either buy, sell, or ship back.

Arrangements have been made by the friends of the Association to offer a Gold Medal, to cost not less than \$50, to be

known as the "Thurber Medal," to be awarded for the finest sample of honey in the most marketable shape. To be contested for only by producers.

We have written Mr. Langstroth, inviting him to attend the convention, and have provided for his entertainment while here.

Special circulars will be issued in a few days, and can be had from the same parties who have the shipping cards and certificates of delegates.

Shipping cards can be had by applying to H. K. & F. B. Thurber, New York; AMERICAN BEE JOURNAL, Chicago; *Bee-Keepers' Magazine*, New York; *Gleanings in Bee Culture*, Medina, O.; Wm. J. Andrews, Columbia, Tenn.; J. H. Nellis, Canajoharie, N. Y.

Delegates' certificates can be had by applying to Wm. J. Andrews, Pres., Columbia, Tenn.; J. H. Nellis, Sec., Canajoharie, N. Y.

These very favorable arrangements are largely due to the Messrs. Thurber, and I cannot speak too highly of their substantial evidence of the interest they take in the prosperity of our society.

Very respectfully yours,

J. S. COE, Vice-Pres. and  
Committee of Arrangements. }

The following correspondence will be of interest:

"New York, Aug. 14, 1877.—HON. PETER COOPER: Dear Sir—The bee-keepers of this country intend holding a National Convention next October. They will make the finest display of bees, honey, beeswax, and apian supplies ever made at any fair, at the American Institute building. Exhibits will probably be sent from every State in the Union. As this is their initial meeting here, they have no hall, and no funds in hand to hire one. We write you to know whether you would not like to supply this want. We understand there will be 500 delegates, and we would thank you to indicate your will in this matter as soon as you conveniently can, that it may be published in the bee journals and agricultural papers generally. Respectfully,

H. K. & F. B. THURBER & Co."

"New York, Aug. 14, 1877.—Messrs. H. K. & F. B. Thurber & Co.: Gentlemen—Mr. Cooper will give the use of the Large Hall, under the auspices of the American Institute. Respectfully,

JOHN W. CHAMBERS."

[This hall is one of the finest in New York city, and we trust that it may be well filled with bee-keepers, and that there may be a full display of all kinds of apian supplies for the inspection of bee men from every State of the Union as well as visitors from other countries. Let there be a general rally and good display. We expect to be present and will do in our power to make both the meeting and display of supplies a success.—Ed.]

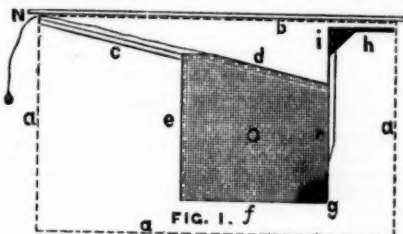
Comb Foundation is a success. That point has been settled by the present season, if we may believe the reports as they come in from those who have used it.

For the American Bee Journal.

### My Queen Cage.

FRIEND NEWMAN—I notice an invitation to those having anything they think of use to bee-keepers to send it to your office.

Herewith I send you a description of a new queen cage for introducing. I see that almost every one agrees that when the queen is liberated it should be done with as little excitement as possible. Mr. Dadant says: "Put in a comb stopper, and let them gnaw it out." Mr. J. F. Spaulding (my neighbor) says, he had one grow out this summer, but instead of the queen coming out the bees went in, and the queen did not get out for 2 days.



You can open my cage the whole width without opening the hive, and there is not a place that there is a possible chance to catch or kill a single bee inside or out. I would send you one, but I thought you could make one cheaper than the cost of sending.

#### EXPLANATION OF PLATES.

Fig. 1, is a representation of cage closed. Fig. 2, the cage open.

a, a, a,—dotted lines,—the inside dimensions of hive.

b, honey-board.

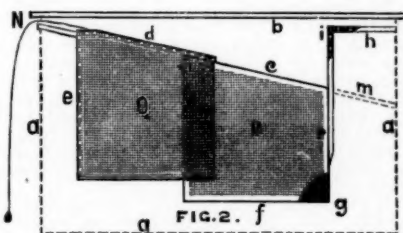
c, top-bar of cage, which is  $\frac{5}{8} \times \frac{1}{2}$  in.

e, one perpendicular bar, and f, the bottom bar. Both should be about  $\frac{5}{8} \times \frac{1}{2}$  in.

The wire-cloth, p, in fig. 2, should be tacked to the bar, with some small brads.

d, sliding bar with some little tins tacked on the back side to keep it from sliding off.

The wire-cloth, o, is tacked to the bars, d and e.



g, is an isolated corner with tin plates tacked on, to keep food for the queen.

h, is a projecting arm or bar which rests on the rabbet of the hive.

i, is a metal corner of galvanized iron.

n, is a small wire fastening on the end of the sliding bar, d, and reaching to the outside of the hive.

If you choose, you can lengthen the bar e, as at m, and fasten it into an empty frame, dispensing with the arm or bar h.

You can make the cage any size you like; I make them 7 in. each way and about from  $\frac{3}{4}$  to  $\frac{1}{2}$  in. thick.

#### DIRECTIONS FOR USE.

Place a small piece of sponge saturated with honey or syrup, and put the queen in with 5 or 6 workers—those that have been with her previously, if you have them—and close it up. Take out a comb from one side of the hive you wish to introduce her to, and spread the brood combs a little, and make a space in the centre large enough to slip the cage into the hive, letting the wire *n*, hang over the top of the hive, and put on the honey-board or quilt. When you wish to let her loose, take hold of the wire, *n*, and draw slowly and carefully until the cage is open. In this way the bees will not know that anything has happened.

Floyd Co., Iowa.

LEVI SUTLIFF.

For the American Bee Journal.

### A Prolific Queen.

MR. NEWMAN:—Judging from circumstantial evidence, I should say I must be the person alluded to by Mr. Alley in the August number of the JOURNAL, where he speaks of a lady in Waverley who has had good success with her bees.

Now, I know that I have not done anything wonderful, yet I do think I have had one remarkable queen, and should like to tell you a little about her. She came in a full stock, which I purchased of Mr. Alley in the spring of 1876. I saw her several times and she was very large and yellow. Having been transported about 30 miles by rail, and 7 or 8 miles in a wagon, the bees were not in a condition to swarm early. They increased fast, however, and on Aug. 7th, they sent out a powerful swarm. I put this swarm into a Bay State hive, which had been furnished with pieces of comb foundation  $1\frac{1}{2}$  in. deep. In less than ten days they had filled every frame two-thirds full of comb. A large part of this was drone comb, but Mr. Alley came and cut out some of it. After this the bees were left undisturbed, except that they were fed daily with sugar syrup. When winter set in, only a few cells in the rear comb had been capped over. I put a piece of blanket around the brood chamber, and left the hive on its summer stand.

In the spring the bees were more lively than those in other hives, and I thought they must be hungry. I began feeding them with a little syrup, and increased to a gill a day. I did not give them any flour, as they began on March 27th to bring in natural pollen. On May 17th they swarmed. A frame of comb and honey was taken from the parent hive and given to the new swarm.

All the queen cells but one having been cut out from the parent hive, no other swarm issued, but on July 17th, just two months from the time it was hived, the May swarm sent out a swarm, and on July 23rd it sent out another. So that a new stock, put into a hive on Aug. 7th, 1876, had increased by natural swarming to four stocks by July 23, 1877. Two of these stocks are rich in bees and honey, and the other two are doing well. They have capped brood in most of their frames. I have fed them and shall continue to do so. The one I have called the parent hive has 12 boxes nearly

filled with comb, but I fear there is not much honey in it. The original stock that I bought in the spring of 1876, has not swarmed this year, but it has given me some extracted and box honey.

But where is my famous queen? Both of the July swarms have young queens. I tried to examine the May swarm to-day, thinking she might be there, but when I had taken out 7 frames the bees became cross, and I put them back.

Perhaps I ought to say here that, although an elderly person, I am not an experienced bee-keeper, as I had never seen any bees, except at a very safe distance, until the spring of 1875.

I have had good success with comb foundation, when used in narrow strips. When I used it 6 inches deep, it always warped. Mr. A. Wyman, of Arlington, Mass., has used a great deal of it this season. Perhaps he will give us his experience.

The Bingham smoker is just what I wanted. Yet I think, for one who does not object to the taste of smoke, a mouth pipe would be better; it leaves the hands free.

One item more. I never had any black drones. Some of my drones are darker than others, but none of them look like those in a hive of blacks. I have far too many of them. I intend to have the drone comb cut from my hives next spring. I fear I have enough of those huge feeders now, who eat more honey than the workers can gather now, as the best of the honey season is over.

E. B. KENDALL.

Waverley, Mass., Aug. 13, 1877.

For the American Bee Journal.

### Strange Things in Bee-dom.

#### HONEY FROM A STRANGE SOURCE.

Several years ago, when the seventeen-year locusts visited us, I noticed, one morning in August, that the bees were going to the woods pretty lively. There were no flowers in that direction, and the weather was such that no honey-dew could be looked for. I followed them to the mountain, and there among the rock oak, their busy hum could be heard for a considerable distance. An examination proved that where the locusts had punctured the small branches, a sweet substance exuded, which the bees were collecting in considerable quantities; in fact some gathered 20 lbs. from this source. Its taste was rather unpleasant, but the bees wintered well on it.

#### A PLEASING SOUND.

While the bees were working on this substance one cool morning, about sunrise, the fog was stealing softly up the ravine towards my apiary, which is situated at the end of a deep ravine, the workers had then made their first sally. In a moment everything was shrouded in one of those thick fogs that come in a moment and are gone as soon. Just at that moment I came to the scene of action; no bee was visible, except one now and then issuing from a hive, but as quickly returning. I heard a strange sound as it were in the clouds, increasing in volume. It was the sound of the main force of 50 hives—heavy-laden bees hovering above the thick fog in vain trying to find their hives. It was a soul-thrilling sound, only to be heard once in a lifetime. Half-a-dozen swarms on the wing at once,



is nothing to be compared to it. Like everything else, it came to an end. The sun gently lifted the fog, and then such a rush—the approach of a sudden shower would never produce as much commotion.

#### EFFECT OF A BEE STING.

In this same fall, while working among my bees, I was stung on the third finger of my hand. In an instant my whole hand was paralyzed. The comb I happened to hold in my hand dropped. The pain was severe; it was sore to the touch for three months, and for a whole year when the part was rubbed an unpleasant sensation was produced. I have kept bees for 30 years and have been stung in every part of the body, but never with such effect.

#### A BEE IN THE EAR.

One day while carrying a swarm of bees on my shoulder, up a steep hill, my foot slipped and I fell on one knee. The cap slipped to one side, so that the bees rushed out, and being close to my head, many were about my ears. One entered my ear and was trying to enter my head; with one finger I tried to remove her, but that made matters worse. I pulled off the abdomen, but the head and thorax entered my head. It was a terrible feeling, and I am satisfied no man could long stand it. I did not know what to do, but in the terrible situation I started for a doctor—happily, on the way the front part of the bee crawled out again.

#### TWO BEES ROBBING EACH OTHER.

One day in April, this year, I noticed one of my bees robbing another. They were of about equal strength. I at once changed stands, but the next day, to my surprise, I found the robber bees (now in the other hive) robbing their late home. I changed them several times, but always with the same result, and at last to my astonishment I found them robbing each other. I left them thus for two days, the excitement continually increasing. No pollen was gathered from flowers, all their energy was directed to robbing; they both had considerable honey, but it was nearly all used up during this excitement.

New Berlin, Pa.

R. B. OLDT.

For the American Bee Journal.

### Cyprian Bees.

Nearly all my visitors admire the beauty of the Cyprian bees. The queens are larger and more beautiful than any queens we ever saw. The drones are of a deep red or copper color, and when they mingle with the red workers they look nearly a blue color. All the bees when hatched look nearly white. The workers are very tapering, with six bands encircling their bodies; and at the side of them are two white, downy spots running lengthwise. Their superiority in working qualities cannot be over-estimated, as can be proved by dozens of visitors.

One hive (No. 7) swarmed five times naturally in 18 days; before it swarmed it gave 154 lbs. of surplus honey, and filled 9 Quinby frames of brood. The swarms have filled 58 frames of brood and given 192 lbs. of surplus up to date (Aug. 18); making in all 67 Quinby frames of brood and 346 lbs. of choice cap honey, which I sold to Adcock & Bro., of Macomb, Ill., at 20c. cash (\$69.20).

Then I reared and sold 13 queens for \$60, and sold 5 of the swarms, at \$10 each, to M. Brown, Industry, Ill., cash \$50. Making \$110 for queens and swarms. The grand total is \$179.20.

The Cyprian bees beat the world. I intend to sell my common stock at \$5 each, and leave none in my apiary. I have a pure gray queen from D. Staples, which is a beauty, and I have 3 Egyptian queens, bought of Mr. Ayres, of Springfield, Ill., which are very large.

The season now is better than I have seen it for many a year. Have taken from 125 colonies nearly 3,000 lbs., and expect 2,000 lbs. more.

My Cyprian bees will be at the McDonough Co., Ill., fair, Aug. 27th to Sept. 1st; and at our B. K. convention at Oquawka, Ill., Oct. 2nd.

HARDIN HAINES.

Vermont, Ill., Aug. 18, 1877.

For the American Bee Journal.

### A Visit to an Illinois Bee-Keeper.

Being but a novice in bee-keeping, and by chance being slightly acquainted with Mr. D. D. Palmer, of Eliza township, Mercer Co., I made him a short visit on June 11th last, and found him busy with his apiary, consisting of about 130 stands of bees all in first-rate order, etc.

But as a little knowledge creates a desire to possess more, I took another trip to his place and found that his bees had increased to over 200 stands, and yet on Aug. 8th they gained exorbitantly. I found that the extractor had been used on 10 hives, from which he had taken 500 lbs. of honey of the purest quality. From the remainder he had taken 4,000 lbs. of box honey, most of it in boxes made up of sections. By the end of the season he will swell his amount of honey from 10,000 to 12,000 lbs. Let me say that everything pertaining to the business is done on strictly scientific principles. So much for the honey part. Mr. Palmer is also engaged in the cultivation of small fruits. He has a raspberry that is a seedling, which he has named "Sweet Home," that bids fair to outstrip all known varieties both in hardiness, size of berry, and unequalled productiveness. He is also planting many other varieties, as well as grapes, etc.

Mr. P. gave me the August number of the JOURNAL, in which I find an article from a Mr. Anderson, of Lawrence, Ill., in which he says, under date of July 9th, 1877, that in the spring he had 80 stocks of black bees and has doubled the number and taken 100 lbs. of white clover honey, and some stocks less than 10 days old had stored over 15 lbs. of honey in boxes.

The probability is that the whole swarm went into boxes when first hived. He winds up with a comparison with some black bees just over the fence, that had proved themselves inferior to his in every respect. I would just ask Mr. A. with much respect, where his bees are by the side of Mr. Palmer's?

On my first visit to Mr. P., I obtained of him two nuclei of Italian bees, and without any additional brood or anything else, they have each of them filled a hive containing 18 frames, 12 in. square in the clear, and will weigh more than 100 lbs. each.

In conclusion, permit me to say a few words in regard to a grape whose origin is in obscurity, as no traces of it can be found farther back than through the hands of two nurserymen, when all trace is wholly lost. I have handled it for 3 years and it has proved itself fully as hardy as the famous Concord, and much larger, as well as a far better grape than the Concord, and has, for the last 4 years, been fit for market on Aug. 13th. It will have an unbounded run, etc. This is the first that has been said of it outside of my own circle of friends.

C. HOTCHKISS.

Rock Island Co., Ill., Aug. 8, 1877.

For the American Bee Journal.

### Bees and Red Clover.

As it seems to be doubted whether any bees do actually work on red clover, let me say that my bees do, and they are blacks. Two or three years ago a Mr. Coffield, living in Caledonia, 5 miles north of me, got a queen or two from Mr. Quinby, and my young queens seem to have met his drones; for stock hives that I know were common blacks now show from one to three bands, and are better dispositioned, but most of my stocks are black, and out of hundreds that I have seen on my common red clover, not one showed a yellow band. I heard of them working on it all spring and summer, but being very busy and hardly crediting what the children said, did not notice it myself till August 10th, when crossing a field of second crop. I found them all over gathering honey and a very dark amber-colored pollen. Mentioning it to my wife, she says positively she saw them on the first crop, too, which was very rank.

WM. CAM.

For the American Bee Journal.

### Notes on Queen Rearing.

I have raised 75 queens since July 8th. I made a hive to hold 11 frames; put 3 division boards in it, which divide it into 4 apartments. The boards must fit close, so that the bees cannot pass, or they will all go together and save but one queen. Cut a small entrance on each side to give each apartment an entrance. In this way four queens can be fertilized in a colony at one time, just as successfully as I can in a nucleus, a rod from any other.

Take the queen from any colony desired to breed from; let it raise cells just as they are sealed over; slip in 3 division boards, cutting it into 4 apartments of 2 frames each. Let its 4 queens begin to lay; then 3 can be used and the colony be thrown together as before. This is the simplest plan for queen-rearing I have ever tried. By this plan 4 splendid queens can be raised in any colony at any time, and the colony not broken up, and can always be left in good condition. Two queens can be raised in one hive, just as easy, by fitting in a division-board and arranging the entrance block to make a small entrance at each side. Two will fertilize at same time.

I use Langstroth hives. Queen cells should always be raised under precisely natural circumstances, *i. e.*, just as they are in natural swarming, when honey is coming

in, the weather propitious, and colonies strong with workers. These conditions should be maintained through honey dearths, by feeding.

Novice's plan of moving an old colony, is very good for raising cells until we get all the nuclei we want. Cells from these nuclei may be grafted into 4 nucleus hives, when their young queens are removed, and in 10 or 15 days they will have 4 more young queens ready for use. A good queen may be raised with a few bees, in warm weather by concentrating their whole force on the cells, by putting in just some larvae. These plans are perfectly practicable. I have tested them after having had years of experience.

I want to answer a few questions: First, there are no black bees nearer than a mile of my apiary, and only 5 or 6 colonies within 3 or 4 miles of it, and 97 out of 100 queens fertilized in my apiary are pure, and perhaps a larger per cent. than this. I have 100 colonies, all pure Italians, carefully bred from the very best imported queens.

Those procuring queens should state whether they want light-colored ones or not; daughters of imported queens are nearly always dark. Newly-imported queens are always darker than American-bred. My imported bees have gathered double the amount of honey that others have.

JOHN ROOKER.

Noblesville, Ind.

### Letter from Germany.

Enzheim, Alsace, July 30, 1877.—“MONS. T. G. NEWMAN: Dear Sir—I receive your BEE JOURNAL with pleasure. It is intensely interesting. I do not see how you can fill it so full of such very instructive matter.

“The year 1877 has been not very favorable to apiculture here. The crop of bees has been, so to speak, *nil*; that of honey is far below the average. Had it not been for the fine weather in June, our bees would have starved to death. The Society of Apiculture in Alsace is prosperous. It comprises 22 branches with 1600 members. It is beginning to spread itself in Lorraine—the adjoining province which Germany took from France in the late war, with this also. There two branches have already been started and several others have been formed. The organ of our Society is *L'Apiculteur Alsacien*. It will after the 1st of next January probably appear in both provinces, and languages—French and German.”

M. DEUNLER.

For the American Bee Journal.

### Western Illinois B. K. Meeting.

The Western Illinois Bee-Keepers' Society will meet at Oquawka, Henderson Co., Ill., Tuesday and Wednesday, October 2nd and 3d, 1877. All persons interested in bees and honey are respectfully invited to come and bring any hive, extractor, or different kinds of bees and honey that they can.

Come and talk bees, and have a good time in general. Reduced rates at the hotels will probably be obtained.

HARDIN HAINES, Sec.

WM. M. KELLOGG, Pres.

## Notes and Queries.

Sumter Co., Ala., Aug. 9, 1877.—“Please answer the following questions through the next JOURNAL.

How often ought combs in the brood chamber to be removed?

Would you permit empty combs to remain in the hive, in the surplus department, for protection through the winter?

What causes foul brood?

SUBSCRIBER.

[1. They will do to breed from for 8 or 10 years. When cells are so small as to make bees under size, then discard them.

2. Perhaps so, South; not here. North, remove frames and fill in with chaff. Always remove partly-filled frames or boxes, which it is desirable to keep white. It is desirable to keep a perfectly tight box, in which all surplus comb honey and comb may always be kept when not desired in the hives.

3. Supposed to be caused by a minute plant or fungoid growth. What causes the plant to grow is an obscure question.—A. J. COOK.]

1. Do bees in natural swarming take a *bee line* for the spot where they alight? and how far are they likely to go before they light?

2. Do they select a spot before leaving the hive?

3. How late in the season will a colony in this latitude continue to have brood?

4. In the absence of brood in the hive do bees gather pollen, *i. e.*, do not bees gather pollen in proportion to the quantity of brood?

5. Will a colony for a time gather honey as well without a queen as with?

6. Is there a necessity for openings in the honey-board? They usually cover the openings, I notice.

I commenced an apiary the past spring with two colonies of hybrids. One soon became queenless and remained so several weeks, yet they have increased to 5, and one left for parts unknown, without even giving warning or saying “good bye,” and left at a “2:40 rate,” leaving me gazing in the air.

Have extracted no honey as yet, but have about 50 lbs. of comb honey. They have been supplied with empty frames as divisions have occurred, but yet they have very little brood.

7. My desire is to keep them strong in numbers. What course is best for me to pursue now to accomplish it?

8. A few days since I changed the empty frames from the sides toward the middle. Will that have a beneficial effect?

9. Will they work in supers when there is room below? QUIZ.

[1. It is generally believed that they do. My experience and observation say yes.

2. Unquestionably, yes.

3. Depends on age of queen, her condition and character of season for honey. With

frost, Sep. 20th. There should be brood on Oct. 15th. I will have brood till Oct., if I have to feed to secure it.

4. Bees will gather pollen without brood, and even without brood or queen. I presume that with a fertile queen and rapid brood rearing they gather far more.

5. I think just as well, and store even more.

6. I desire no openings about the hive, except the entrance, but I want that to be ample.

7. To keep colonies strong, don't increase too fast. Keep vigorous, prolific queen, and feed if the interims of nectar secretion by the flowers are too long.

8. When cold, keep the brood altogether; when warm, it makes little difference, if colonies are strong.

9. They are not apt to.

Adendum—Keep colonies strong.—A. J. COOK.]

Knoxville, Iowa, Aug. 11, 1877.—“This has been one of the most unproductive honey seasons in this section ever known. Bees had to be fed till July 1st; since then they have barely made a living. They may do better from now till frost. Why is it that a queen lays from 1 to 6 eggs in a cell, with plenty of room in the hive? I have such a one, and she is a beauty—a bright yellow Italian—and I am puzzled at her conduct. Should she be superseded?”

A. U. CROSBY.

[Usually, the reason is want of cells or bees. With many cells; if the bees cannot cover the combs, the queen will put more than one egg in a cell, even though all cells are not used. The queen should not be killed. Give her more bees.—A. J. COOK.]

Lunenburg, Tenn.—“I send specimen of two honey plants. No. 1 with pink bloom has been in bloom several weeks and bees frequent it more than any other plant in this section. It grows from 2 to 3 ft. high, with a number of branches. It yields no pollen. The other is not so good for honey, and blooms all summer and fall. What is their value as honey plants?”

M. G. GRIGSBY.

[No. 1 is an aster. There are probably over 100 species in the U. S. All are good honey plants. No. 2 has no leaves to help decide the species; is probably the *Kuhnia eupatorioides*.—A. J. COOK.]

WANTED.—We want the following back numbers of THE AMERICAN BEE JOURNAL: July, 1874; January to July, 1875; and May, 1876. Any one having them to spare, will please notify us by postal card, giving price. Don't send them without first hearing from us, as we want to get them only from one person.





### Secure a Choice Queen.

We now renew our offer to send a choice tested Italian queen as a premium to any one will send us four subscribers to THE AMERICAN BEE JOURNAL with \$8.00. This premium, giving a good queen for four subscribers, will pay any one for taking some trouble to extend the circulation of the JOURNAL. Premium queens will in every case be tested.

**A HINT TO BEGINNERS.**—Those who may desire to read up in the literature of bee-keeping, are advised to obtain the first Volume of THE AMERICAN BEE JOURNAL. It is worth five times its price to any intending bee-keeper. It contains a full elucidation of scientific bee-keeping, including the best statement extant of the celebrated Dzierzon theory. These articles run through all the numbers, and are from the pen of the Baron of Berlepsch. We have but a few copies left; price, \$1.25, in cloth boards, postpaid.

### Notice—"Bee World."

The *Bee-Keepers' Magazine* for July contained a short notice of the *Bee World*. The editor states that since the change in Feb., that quite a large number have sent their names and remittances to Mr. Moon, not a cent of which he has received, and that he did not propose to fill any of the orders unless Mr. Moon first sends him 75c. for each subscriber; he also advises all interested persons to communicate with Mr. Moon in regard to the matter.

Now as Mr. King had made the above statement to his readers, it might leave the impression on the minds of some that the few subscribers—12 in number—would lose their money. I very kindly requested him to state in the August number of the *Magazine* that the subscribers had been supplied with the AMERICAN BEE JOURNAL; but to my surprise the request was not granted. Believing that all or nearly all of his subscribers took the JOURNAL, they will know that my subscribers are made happy by the monthly visitations of the old AMERICAN BEE JOURNAL. A. F. MOON.  
Rome, Ga.

**HONEY JARS.**—Friend Muth has a large lot of honey jars on hand and proposes to sell them for the balance of this season at greatly reduced prices. See his advertisement in this issue. We supply them also at his prices.

### WARTS REMOVED.

A positive cure. Painless and stainless. Price \$1. Order from Dr. Quincy A. Scott, 278 Penn. Ave., Pittsburgh, Pa., or through any druggist. A liberal discount to dealers. Circular free.

### Honey Markets.

**NEW YORK.**—The movement in honey began earlier this season than usual. The failure of the California crop, which has always been sold net weight, will render it impossible for packers to pack comb into jars at last year's prices. They will be obliged to buy clover and basswood honey in caps gross weight, to transfer which into jars will necessitate large losses in tare, and will cause an advance for comb honey in jars. This will probably limit their sales, and we apprehend the demand will shift—jar goods will have a rest, and the call will be more for fine honey in neat caps.

The great desideratum of the day is a honey carrier in which comb honey can be safely transported. All the large crops in this State have been sold, including those of Messrs. Elwood, Root, Doolittle, and Betsinger.

Shipments of new crop Louisiana strained and extracted honey, even thus early in the season, aggregate many hundreds of barrels. Producers seem anxious to realize, and in some cases have ordered sales at 90c. per gallon. Basswood and white clover extracted rules firm.

West India honey in bond, per gal., 82@85c, free, \$1.02@1.05; New Orleans, extracted, 1.02@1.05; basswood or white clover, extracted, 9@12c. 2 lb. white clover, or basswood, in Isham, Hetherington, or Betsinger style of caps, single combs, neatly crated, 18@20c.; same honey, larger caps, 15@17c.; buckwheat, 10@12c.

### BEESWAX.

No demand for export; the low prices that rule are no inducement to country holders to ship in their wax.

Exports since last report... 20,963 "  
" from Jan. 1st ..... 82,196 "  
" same time last year ..... 47,406 "  
H. K. & F. B. THURBER & Co.

**CHICAGO.**—Choice new comb honey, 14@18c. Extracted, choice white, 8@10c. Beeswax, 25@30.

**CINCINNATI.**—Quotations by C. F. Muth. Comb honey, in small boxes, 12½@15c. Extracted, 1 lb. jars, in shipping order, per doz., \$2.75; per gross, \$30.00. 2 lb. jars, per doz., \$5.00; per gross, \$55.00.

**SAN FRANCISCO.**—Quotations by Stearns & Smith. White, in boxes and frames, 15@18c. Strained honey in good demand at 10@15c.; comb, 11@12½c.; beeswax, 27@30c.

San Francisco, Aug. 9, 1877.—"In our former letter of market reports, we estimated but a quarter of the crop of last year; we now are satisfied that the crop will be nearly an entire failure, east and south of San Francisco Bay, as there is but little even made in our northern counties and Oregon. The entire coast will not produce enough for this market, and we will have to import from our neighbor, the Mexican State of Chinaloa, as in former years, which produces a superior honey. Our market has been cleared of all poor lots of honey for feeding bees, and also for shipment to London."

STEARNS & SMITH.

**RIFLES, SHOT-GUNS, REVOLVERS,**  
sent C.O.D. for examination, all charges paid.  
No risk. No humbug. Write for catalogue.  
Address, GREAT WESTERN GUN WORKS,  
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# **HEADQUARTERS** FOR **HONEY and WAX.**

**CONSIGNMENTS OF LARGE CROPS**  
**PARTICULARLY REQUESTED.**

We enjoy facilities for disposing of them promptly and at the best market prices. Shippers to us have the satisfaction of knowing that they avoid the risks which are sometimes incurred by shipping to irresponsible parties.

**Advances made on Consignments if desired.**

We handle more honey and wax than any other house in the United States; pack largely both for home and export trade, and through our extensive connections are enabled to keep goods moving when others are waiting for the market.

Respectfully,

**H. K. & F. B. THURBER & CO.,**

**West Broadway, Reade and Hudson Streets,**

**NEW YORK CITY.**